

# RECORDS <sup>OF</sup> THE PAST

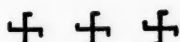
VOL. XI



PART II

BI-MONTHLY

MARCH-APRIL 1912



## THE VENERABLE CITY OF YORK

**T**HE history of this wonderful old English city, in its outlines, covers much of the history of England. Like Gloucester, it has been the stage on which the most stirring events have been played. Roman, mediæval, and modern York all have been, and indeed still are, nobly representative of all that is best in Britain. But it is perhaps in Roman and mediæval times that this famous city has been most conspicuous, the memorials of these early ages confronting most picturesquely the traveler of today.

Many an old English city, as strikingly illustrated in the case of Gloucester, follows the almost identical lines of the original Roman streets. The city is built on the Roman plan. Lincoln is also a remarkable example of the use of a Roman site, the Norman castle and the famous cathedral of Remigius occupying ancient and historic territory. Prof. G. Baldwin Brown and other scholars have pointed out that the Saxons, as a rule, shunned the Roman cities and built their villages, when they at last began to build, upon new sites, avoiding also the great Roman highways. But the remains of such great cities as York, Lincoln, London, Gloucester and Chester must have been too convenient not to have been utilized. Gradually, among the imposing remains of Rome's vanished glory, the Saxon hovels appeared, and a new race began to arise among the old cities, while the great Roman constructions were either wilfully destroyed, or suffered to crumble in utter neglect. But while much was thus laid low in the dust while careless generations built over the remains, much still kept its place in seemingly imperishable strength. The Newport Gate at Lin-

coln, for instance, through which ran Ermine Street, one of the finest of the great Roman roads, was so massively built that it stands to this day, a wonderfully impressive memorial. Through how many epochs of history this rugged old archway has endured! Upon what strange events it has looked down! The Roman has come and gone, the Saxon was followed by the Norman and the modern world has taken their places, but the old archway still stands, the silent witness of it all. And in like manner many of the imposing remains of Roman York exist till the present day, remarkable testimonials to an earlier civilization.

The arts of ancient Rome were, as is well known, only borrowed arts. The practical Roman might excel in military organization, in law and in government, but when he essayed to broaden and beautify his life he must turn to the much more versatile Greek. The world will perhaps never fathom the exact origins and causes of Greek civilization and culture.

The poet Shelley wrote:

But Greece and her foundations are  
Built below the tide of war,  
Based on the crystalline sea  
Of thought and its eternity;  
Her citizens, imperial spirits,  
Rule the present from the past,  
On all this world of men inherits  
Their seal is set.

The haughty Roman therefore, even in his conquest of Greece by force of arms, must acknowledge the intellectual supremacy of that wonderful nation, freely imitating her, especially in the arts. But while thus slavishly copying from other sources, Rome had also a great part to play in the world's history, never to be surpassed. Greece and Rome, in their several provinces, have modelled much of present-day civilization.

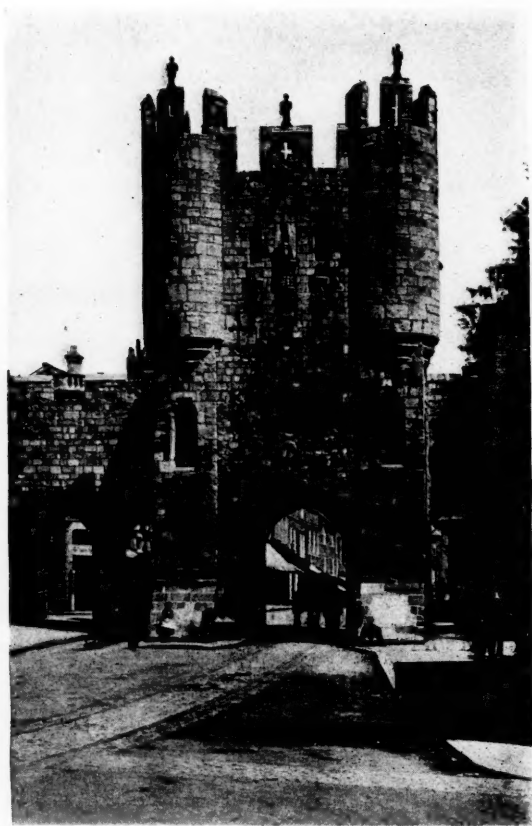
The city of York, in northeastern England, was the stately capital of Roman Britain. Colchester, the ancient Camulodunum, was the earliest Roman settlement in England, but York became the seat of government of this island province. Here the Emperor Severus came with his two sons, Caracalla and Geta, in order to drive back the Caledonians, and in this city Severus died. Here in 293, the Emperor Carausius was slain by his minister Allectus, who was then proclaimed Emperor; in this city Constantius Chlorus made his residence; while at York Constantine the Great was proclaimed Emperor. Small wonder then that this venerable city stood in those early days in proudest splendor. Great marble baths, fine palaces and villas, and beautiful tessellated pavements have been uncovered in its vicinity, while the Museum of York contains today "the most extensive collection of Roman objects found on any Roman site in Britain." Even when the sway of the Roman was gone forever, the city still kept its majestic prestige, and the Church, a successor, in certain respects, as historians have pointed out, of the ancient Roman Empire, retained York as the seat of the English archbishopric. For generations York contended with Canterbury for the spiritual headship of the kingdom; it exerted its power all through the Middle Ages; while the town was a strategic point of the Royalists in the Civil Wars.



STATUE OF ROMAN SOLDIER DISCOVERED AT YORK

Its splendid Minster, where King Edwin was baptized by Paulinus, some of the remains of this early church still standing beneath the present great structure, has been the spot where kings and queens have played their parts. Highly picturesque indeed have been some of the splendid scenes enacted within these stately walls. Here royal marriages have taken place, here in 1175 William, King of the Scots, followed by his train, laid upon the high altar his helmet, spear, and saddle, as a token of his submission to King Henry II, while a few years later, a more tragic drama was represented, when after the terrible massacre of the Jews, their bonds were burnt in the nave of the great edifice. As to the city of York itself its associations, as a whole, are almost countless. An English writer says:

"Not London itself, the capital of the empire, not Canterbury, the seat of that other Metropolitan of our National Church, calls up more varied or more brilliant recollections than are inseparably associated with the name and title of York; associated with the fortunes of that great



MICKLEGATE BAR, YORK

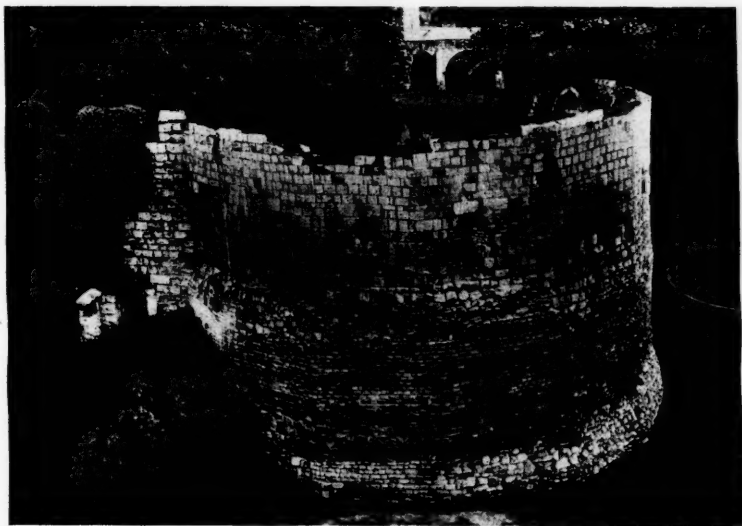
branch of the House of Plantagenet, which with so steady a persistence, contested the crown of England; associated with a long list of the bravest and noblest of the land, who, during the Wars of the Roses, staked life and fortune upon the House of York."

Especially however in the age of Alcuin and the famous School of York the city became nobly conspicuous. Then the town, carefully fortified in its southern section, where it was most exposed to attack, became known for its commerce and wealth no less than for its learning. Here Asser, the biographer of Alfred and other famous men were educated, and here Siward, the rugged Earl of Northumberland, was buried, in the monastery to which he had contributed so liberally. Earl Harold bravely but ineffectually attempted to hold York against the forces opposing him, while in the city William the Conqueror finally received acknowledgment of his authority from Malcolm of Scotland, from the Bishop of Durham, and one of the great leaders of Northumberland. Here he fortified the



existing castle, and kept Christmas Day 1069 "amid the blackened ruins of York" after having laid waste so much of Northern England in order to force its submission.

To the ordinary traveler who visits today the prosperous modern city probably one of the most striking and unusual sights that meets his eye is the long lines of the lofty city walls which, unique in England, still mark out the mediæval boundaries of the city. Their great extent, "the entire circumference of the present fortification is 4,840 yards, enclosing 263 acres, whilst that of the Roman walls was 1970, enclosing 50 acres," their remarkably perfect preservation, makes them easily one of the most picturesque objects in all England, while their wonderful history renders them doubly interesting to every thoughtful person. These lofty walls, where the heads of royal prisoners were sometimes placed in



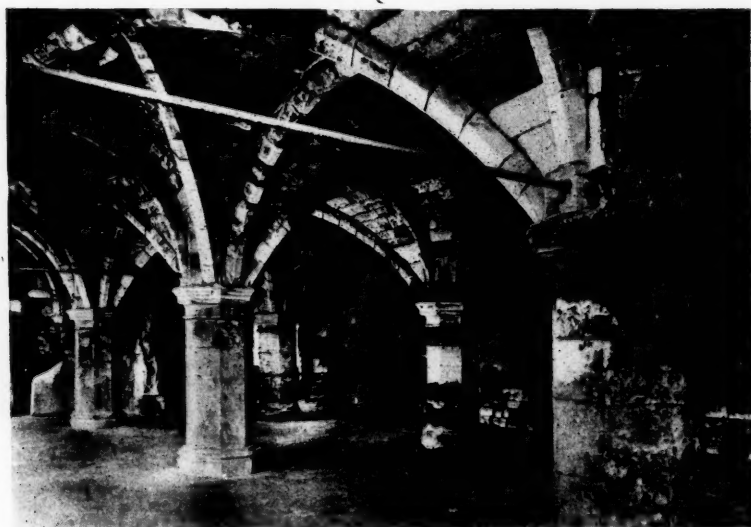
ROMAN TOWER, MUSEUM GARDENS, YORK

ghastly mockery, as in 1460 after the battle of Wakefield, have records of surpassing interest. The original Roman fortifications are supposed to have been built during the second campaign of Agricola, A. D. 79; the Multangular Tower and a short stretch of the wall adjoining still remain from this period, but the work as a whole dates mainly from the time of Edwards I and III, and a reconstruction after the Civil Wars. These mediæval fortifications "display fragments of almost every age from the end of the XI or the commencement of the XII century down to the present day."

The four larger and highly picturesque gates or bars have probably Norman cores, while one of them, Bootham Bar, is on the site of one of the old Roman gates. The bold lines and striking towers of these portions

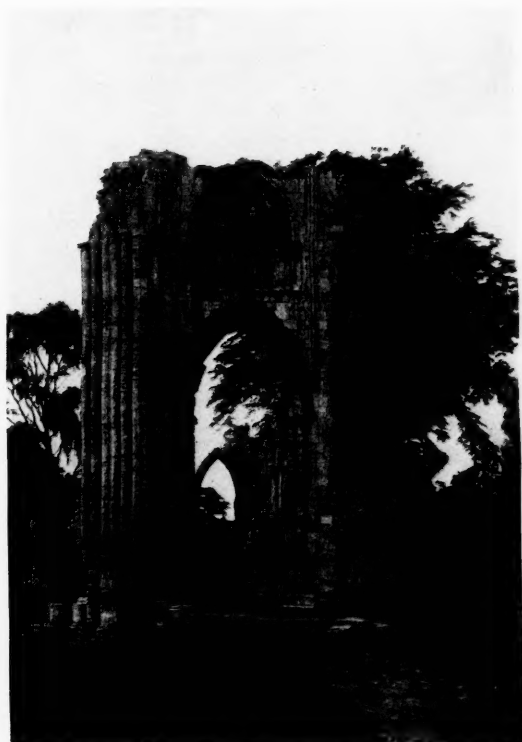
of the fortification are of peculiar interest, and add greatly to the impressiveness of the whole. The Multangular Tower represents, as was said, Roman work, and is wonderfully well preserved. The flat Roman tiles have been used here in connection with other material, as is often found in this ancient construction. The upper parts of this tower are mediæval. Clifford's Tower is built on the site of the old castle of the days of William the Conqueror. The mound upon which it is built represents a still earlier period.

The old churches of York are a study in themselves. The glorious great Minster, representing construction from the days of the Saxons down to late mediæval and even modern times, is, of course, of interest to every one, comparing in size and magnificence, as it does, with the largest ecclesiastical edifices of England. As a study indeed of the various



ST. LEONARD'S HOSPITAL, MUSEUM GARDENS, YORK

periods of the Gothic style of architecture it is invaluable. Professor Willis wrote of York Minster: "The church is an aggregate of various styles, having Early English transepts, a Decorated nave, of which the body has geometrical tracery, and the west end flowing tracery. The choir is in two portions of which the most easterly is of very early Perpendicular, and the western of later Perpendicular. The central tower and the western towers are all Perpendicular, and subsequent to the choir." For typical Saxon work however, as for instance, in the belfry of St. Mary Junior, one must look elsewhere. "It is remarkable that such Saxon remains of buildings as are found in York are contained within the two suburbs of Walmgate and Micklegate. Saxon interments in great number are found about the city, many laid above those of the Romans, as the British remains are laid below them." Isolated portions of fine Norman work



ST. MARY'S ABBEY, MUSEUM GARDENS, YORK



THE MINSTER FROM THE CITY WALLS, YORK

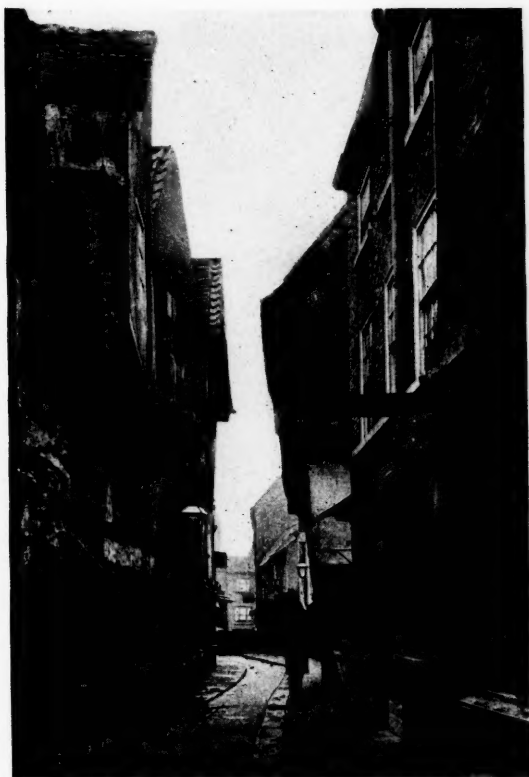
can be seen in the porch of St. Margaret's Church, and in the old church of St. Denis. Both of these buildings are in Walmgate.

Strikingly beautiful however and well-known to the traveler are the fine ruins of St. Mary's Abbey in the Museum Gardens. This ancient section of the city indeed, in the immediate vicinity of the precincts of Roman York, is everywhere historic ground. Old streets, leading up to the Minster, such as Stonegate, show fine mediæval houses, with jutting gables and overhanging stories, while the very names of such old by-



SANCTUARY KNOCKER, ALL SAINTS, PAVEMENT, YORK

ways as Goodramgate, Aldwark and Hungate arouse one's curiosity. The Museum Gardens, themselves well laid out and kept in excellent condition, adjoin the Multangular Tower, and contain the ruins of St. Leonard's Abbey, a picturesque Norman structure of the time of King Stephen, its chapel however of somewhat later date; the Museum itself; and the ruins of St. Mary's Abbey. This latter structure, occupying the site of a building erected a century earlier, dates from 1270. The Abbey was taken possession of by the Crown at the Reformation, while the ruins were outrageously plundered for building material during the XVIII century. The shattered fragments however, in their gleaming whiteness, mark, the author of *The Ruined Abbeys of Great Britain* reminds us, "the high tide



THE SHAMBLES, PAVEMENT, YORK

of Gothic art," and preserve, down to the present, much of their one-time richness and glory.

The Museum contains a wonderful collection of antiquities. Of these by far the most interesting are the memorials of the Roman occupation. When, in 1875, a large tract of ground was excavated in order to build the new railway station at York, a large number of most remarkable and valuable relics were brought to light. Most of these have been placed in the Museum. Here are fine tessellated pavements, one especially representing by its mosaic heads the symbols of the four seasons; Roman tombs, with inscriptions; fragments of altars, statues, and many fine specimens of pottery. Especially interesting are some ancient lamps of classic design decorated with Christian emblems. A most remarkable collection of 1000 coins of the time of Constantine was found in 1891 at Langwith, near York, and placed here in the Museum. Another fine pavement with a collection also of fragments of beautiful iridescent glass, was the result of explorations in the neighborhood of another nearby town. Other excavations about the city have revealed extensive baths and a complicated heating-system for some large building, while the many tiles and



ROMAN COFFIN, THE MUSEUM, YORK

flues gathered together here prove that the Roman had learned how to build for comfort in the colder northern climate.

The stately old city of York, the British *Caer Eborac*, the Roman *Eboracum*, today a beautiful and prosperous town, is indeed a mine of wealth to the traveler. "Welcome, my Lord," Shakespeare makes Queen Margaret say, "to this brave town of York," and he must be truly indifferent who can fail to appreciate the fascination of this marvelous old city. Even the most careless will be impressed by its wonderful mediæval remains, while the splendid great Minster, itself representative of so much of England's early history, is a delight to every one. In this noble old city, where stand memorials of England's greatness from the days of the Romans to the present, the soil has grudgingly yielded up many of its ancient secrets, and thrown light upon a still earlier civilization. The story of Imperial Rome is a story of almost illimitable power and grandeur, and of energy that was indomitable. From the mistakes as well as from the successes of this mighty Roman Empire the modern world can learn many a useful lesson. On the other hand, the chivalrous and noble, as well as dark and gruesome deeds of the Middle Ages which have taken place with the city of York as their background, serve as inspiration and warning to future generations. The records of York could ill be spared from the history of England.

York's not so great as old York was of yore,  
Yet York it is, though wasted to the core;  
It's not that York which Ebrauk build of old,  
Nor yet that York which was of Roman mould;  
York was the third time burnt, and what you see  
Are York's small ashes of antiquity.

ADELAIDE CURTISS.

Fishkill-on-Hudson, N. Y.



## THE BURIAL MOUNDS AT ALBANY, ILLINOIS

**I**N WHITESIDE COUNTY, Illinois, about midway between Savanna and Rock Island just below the village of Albany, where the Mississippi turns to the west, is located a group of mounds where for several years the Davenport (Iowa) Academy of Science has conducted excavations. Under the direction of the Academy a thorough topographical survey was made some years ago and each mound recorded and described.

From this point diverges the Meredosia slough, now diked and locked, the boundary line between Whiteside and Rock Island Counties, and one time an open channel between the Rock and the Mississippi. The name is from the French, *Mere d'osier*, or Willow-water. On the wide bars and beaches hereabouts stranded vast quantities of flood-wood, and the place was, and still is to some extent, the haunt of the wild fowl. With an abundant fuel supply, and fish and fowl and adjacent maize land, this place, located at the head of what was in early times a much frequented water route, appears to have been the site of a permanent village back to which for final interment were brought the bodies of those who perished elsewhere.

Back from the shore of the slough the surface on the east rises to rounded, loess-covered knolls, and, generally speaking, it falls away from these crests toward the east in a series of longer and somewhat intricate undulations to a wide valley,<sup>1</sup> one time doubtless another cut-off of the Mississippi, setting in from above the village of Albany and extending to the slough, leaving the Albany hills quite detached from those bordering the greater valley on the east. On the south lies a wide triangle of sand plain, comprising the northern part of Rock Island County, known locally as "Dosie" or "Dosie bottoms," the apex of the triangle at the village of Cordova.

The mounds, great and small, about 80 or 90 in number, are scattered over several farms, occupying the foot of the hills as well as the crests, but the work to be described briefly here was confined to the northern subgroup. The writer was called to this field in the fall of 1908 to direct the work of the Academy under the supervision of its curator, Mr. J. H. Paarmann, and with a small force of workmen we thoroughly examined the structure of 8 mounds, cutting them away in vertical sections, finding, in every instance, the primary interment intact, and securing as our reward an unparalleled wealth of authentic skeletal and cranial material for purposes of comparative study.

In mound 9, a hill mound, which it is desired to describe in some detail, we found 4 separate and distinct modes of primary interment, and beneath the mound a preëxistent hill ossuary, into which the mound-builders intruded when digging their central burial pit.

A somewhat uniform characteristic of some of the burial mounds of the Wisconsin-Illinois district is a centrally located quadrangular oblong mortuary vault, in which the bodies are found, both extended at length, and

<sup>1</sup> See U. S. Geological Survey; topographical map "Clinton."



FIG. 1. MOUND NO. 17

sitting or bundled. This pit is sunk a few feet below the natural level, or it is excavated in a previously made core or nucleus of clay or ash, and this was a constant feature in all the mounds examined under my direction. Sometimes, as at Dunleith, Illinois (Mound 16),<sup>2</sup> the mortuary chamber is found walled about with flat stones, or we find the remains of a log pen, roofed with poles, as at Portage (Mound 16, near Galena, Ills.)<sup>3</sup>

## MOUND NUMBER 20

Mound 20, a large symmetrical circular mound 9 ft. high, was first examined. It occupied a nearly level space of boulder-strewn ground at the foot of the hill. A crescent-shaped figure of river and cobble stones, concealed beneath the sod, covered the entire west slope, half way between the base and the summit, with nothing whatever beneath it of any significance. A symmetrically rounded central core, built up of exceedingly hard clay dumps alternating with dumps of earth, had been cut through at the center to the stony natural level, in digging the mortuary chamber. Each of our vertical sectional cuts proved this, for we could plainly see where the broken-up clay had been carried and dumped over the edge of the mound then building. We found the mortuary cavity thus made partly filled with soft dark earth upon which many stones and the mass of the mound above had settled.

Within the chamber were some extended and some bundled skeletons and one little heap of burnt bones. Much interesting detail must be

<sup>2</sup> Fifth Annual Report, Bureau of Ethnology, pp. 34-37.

<sup>3</sup> RECORDS OF THE PAST, Vol. VII, Part II, p. 85.

omitted but there had been 9 bodies deposited here, three of them children, and vertically, against the northeast wall, were 5 adults, sitting or bundled skeletons, found in some disorder. The pit appeared to have been roofed in with timbers and stones, and above this had been deposited 18 more skeletons associated or beneath stones and clay, the whole mass having shifted somewhat when found, with the disintegration and fall of the roof of the vault. Near a bundled skeleton in the vault was a highly polished steatite pipe with urn-shaped bowl and curved or "monitor" base, an arrow point and a crescent-bladed red flint knife, shaped like a modern leather-worker's knife. Ten and one-half pounds of lead in 3 nuggets were found with nothing near them, beneath the east base of the mound, and at one



FIG. 2. SKELETONS IN MOUND NO. 17

point, south of the burial vault where a very hot fire had burned, was a white mass like lead-carbonate, a sample of which was retained. Except in the one instance stated, no implements or ornaments of any kind were found accompanying the interments, although the surface on which the structure was erected is a village level, strewn with potsherds, broken bones, arrowpoints and flint chips.

#### MOUND NUMBER 17

Mound 17 (Fig. 1) stood just back of mound 20 on a gentle slope at the base of the hill. It was built upon a thin surface soil overlying a very compact limestone or chert gravel, into which the burial pit had been sunk

2 ft. The excavated earth and gravel from the grave, cast out on all sides, could be seen in our vertical sectional cuts, the yellow earth covered by the gravel. The quadrangular grave, 8 ft. 9 in. by 6 ft. 3 in. was inclosed by decayed wood on all 4 sides, indicating a log pen, 14 by 11 ft., with a single row of stones along the longer sides, outside the logs; but there were no indications here of a covering, and the superimposed earth, a soft yellow loam, had settled and filled the pit.

Figure 2 shows the grave when the skeletons within had been uncovered. Six extended bodies, one bundled body in the north corner and the bones of a young infant heaped upon the crossed hands of the second skeleton were found. The bones were very dry and brittle, the articular ends separating from the shafts of the long bones. The weight of 9 ft. of earth over them



FIG. 3. STONE WORK ABOVE GRAVE IN MOUND NO. 23

had crushed every skull but one into the compact gravel bottom of the grave, so that in removal they fell apart. Except fragments of river shells, nothing whatever was found with these interments, neither implements, ornaments nor pottery, although part of a pot was found with a portion of a skeleton 18 in. below the summit of the mound.

#### MOUND NUMBER 23

Mound 23 occupying a position south of Mound 20, was a much smaller mound, having an elevation of but 4 ft. It was built over a surface strewn with large slabs of limestone in much disorder, lying on a bed of old beach or river gravel, for the most part of glacial rather than local origin, and the burial pit, 7 ft. 6 in. by 5 ft., penetrated this gravel to a depth of 15 in. to a white sand underlying the river gravel. The pit was filled with mixed

clay-loam and black earth in which were many stones, some partly burnt, evidently having fallen from above. At the bottom of the grave was one partly extended and perhaps 5 bundled or seated skeletons, one that of a child. In the corners of the pit we found in all 10 long sharpened bone pins, perhaps used to fasten some form of covering above the bodies. Figure 3 is a photograph of a bowl-shaped stone work found above the grave, doubtless originally a horizontal pavement covering the mortuary chamber, on which a fire was kindled. Fragments of what must have been 2 seated skeletons above the grave were found beneath and mingled with the stones of this bowl-shaped pavement.

Excavated gravel from the burial pit was not cast out on all sides here as at Mound 17, but was all thrown out on the east side, and a partly flexed skeleton, complete, was found at the top of the gravel heap, but 15 in. beneath the surface. Turning over the large flat limestone slabs that littered the gravel surface on which the mound had been built, south of the burial pit we found beneath one stone a heap of cracked and split human bones. There were perhaps two pecks of these fragments and one similar fragment was later found in the bottom of the burial pit. Nothing was deposited with any of the bodies either within or without the grave, excepting the bone pins mentioned.

#### MOUND NUMBER 12

Mound 12, part way up the hillside back of Mound 17, was a little mound, looking like hundreds of little hillside mounds found scattered along the river hills of Illinois, but it held at the center a mortuary pit 8 by 5 ft., like that at Mound 17, containing 4 extended skeletons in the same state of dry and brittle decay. The grave had been sunk, through a thin gravel, through a foot of yellow clay, and into a blue gravelly clay to a depth of about 3 ft. There were no indications here of the inclosing pen, but fallen stones, partly burnt, which with yellow clay of the mound filled the pit, indicated a fallen roof-covering of some kind. The excavated material, clay and gravel from the grave had been thrown out on the old hill surface on the lower side. Under this we found 2 small potsherds, but nothing whatever had been deposited with the bodies.

Between the femora of one of the skeletons were the bones of a very young infant. The right femur of this skeleton bore on the anterior surface of the shaft of the bone an ante-mortem injury about which a bony ridge had formed, and above this was a circular incision not unlike that which might result from a gunshot wound. Laboratory work alone could determine the nature of this, as the missile, if such, must be still lodged in the bone. It is hoped that we may have some further light on this point, as all other indications point to a much greater antiquity for these burials than gunshot wounds would indicate.

#### MOUND NUMBER 14

Mound 14, having the exterior appearance of a small earthen mound, 28 in. high, stood at the base of the hill north of Mound 17. The base was

elliptical rather than circular, 36 by 24 ft., the major diameter oriented the same as the mortuary pit, N.E. and S.W.

Scattered stones were encountered 4 in. under the sod, and beneath this the entire central part of the mound consisted of large stones, rubble stones and gravel. Figure 4 shows the central stone work when the earthy part of the mound had been cleared away. A child stands at the end of each wing of the figure thus exposed, but no plan or sequence developed when fully uncovered. Removal of the stones disclosed the interments in a shallow grave, 9 in. deep in the coarse compact gravel bedding. The grave was of the customary quadrangular type, 8 by 6 ft., and contained 7 skeletons. Two lay extended in natural order in the bottom of the grave, but parts of others were in some disorder, more or less commingled, or perhaps originally buried in a sitting posture. One skeleton was that of a child.

Many of the bones from this grave, while denoting rather above the normal average in stature, were yet exceedingly slender bones, and strange to say, many of them were in a condition of decay much less advanced than those from other mounds, perhaps owing to the protection the covering of rock and gravel afforded them. Northwest of the grave, mixed in with the stones, were a few scattered fragmentary parts of a skeleton. Two freshwater clam shells were found in the grave, but nothing whatever was deposited with the bodies.

#### MOUND NUMBER 9

Mounds 7, 8 and 9 are shown in figure 5, occupying the breast of the hill above those previously described. The photograph shows all 3 mounds in profile, illustrating well a characteristic feature of hill mounds, the enormous waste material down the hill involved in their erection at the extreme verge of the declivity. Mounds 7 and 8 have not been examined.

Mound 9, standing at the extreme southern end of the hill, was entirely removed. Externally it had the appearance of an elongated oval, attaining a ridge-like elevation of 8 ft., while mounds 7 and 8, covering a smaller area, are circular. The major axis of the mound, conforming to the ridge on which it was built, extended 80 ft., 20° west of south, and the transverse diameter, allowing for waste of material down the hill, was about half this.

Under the north central part of the mound, sunk 2 ft. below the original hill top, was a grave with confines less well defined than elsewhere, but enclosed by decayed wood of a timbered pen, 13 by 9 ft., as at Mound 17. In it were 2 skeletons, covered with decayed wood, extended in the grave with parts of others, two of them children. The bones were far gone in decay, and some parts had entirely disintegrated or were never interred. Some of the bones of a foot, misplaced when interred, were found cemented one to another in this position, lending unexpected but indisputable corroboration to the contention advanced that the bodies in all these mounds were interred denuded of their fleshy parts, while still the cartilages held, in most cases.

Nothing was found with the bodies except fragments of unworked river shells under one of the children. In removal the bones fell apart,





FIG. 5. MOUND NO. 9



FIG. 4. STONE WORK UNCOVERED BENEATH MOUND NO. 14

the shafts of the long bones parting from their articular ends, the sacrae disintegrating in separate vertebrae and the skulls fell to pieces. Much decomposed plaster, or shell-like stuff, coated the bottom and sides of the grave, along with some thin black velvet-like patches, exactly as found in the grave at Mound 16 at Portage, Illinois, previously mentioned. Part of an arrowpoint was found just outside the northeast side of the enclosing pen, and the base of another outside the northwest side.

At various depths in the mound above this grave we found parts of 7 skeletons, lying both above and below an oval area of hard baked earth. Pieces of burnt earth and bone found in the grave below probably fell from these upper burials.

A floor of trampled earth and clay lead south to a great central pit differing from the graves previously found. This floor was not a manipulated or laid floor as in the Portage mound, but resulted from passing to and fro over the newly thrown out earth from both pits, showing that the burials in both were made at about the same time. The central pit was a roughly squared hollowed space, dug 2 or 3 ft. below the old hilltop, and was covered in by timbers laid lengthwise of the mound, supporting several rows of stones that originally covered the spaces between the timbers, which were sometimes sufficiently well-preserved to show the texture of the wood, although with the slightest pressure they crumbled. The bottom of the pit was occupied by 3 skeletons, extended with an approach to a natural order, two with skulls southwest. One was perhaps placed in a sitting posture with legs only extended, as the upper part was not found. Above these bodies was such a mass of disarticulated and hopelessly commingled bones, that in their removal none of us could say which was the upper part of that particular body, if it was there. At the feet of these skeletons were 2 skulls and most of the bones of a child. Three more skulls were above a heap of bones near the extended left leg, etc. Detail must be omitted, but near the shoulder of one was a white flint point, and a point of much ruder workmanship had previously been found near the center of the mass of bones.

Earth from this pit was thrown out upon what was then the hill surface above this older ossuary, and the disturbed bones, in fragments, we found heaped up at the edge of the pit or, on the opposite side, scattered down the hill slope under the mound. This old ossuary extended beneath an unbroken sod-line nearly to the southern end of the mound, where it terminated on the eastern side in a roughly triangular pavement of rude stones, and on the west in 2 graves and a great stone grave, to be described later.

In most cases in the old hill ossuary, scattered stones lay above the bones, sometimes crushing in a skull; again there were two horizons of bone with stones between and above; the latter lying on what was then the surface of the hill. Some of the stones were burnt red and the bones beneath were partly burnt. Further south the ossuary became a compact bed, 3 to 6 in. thick, with skulls in clusters of 2, 4 and 6 together. Lower jaws were missing from nearly all skulls and the skulls so fragile and so difficult to extricate that not over half of them could be removed, and then only by removing them in a block of earth to bind them together. All the bones of

this ossuary were filled solidly with the earth in which they lay and were soft and chalky, easily cut with trowel or shovel, requiring great care in removal.

At this level, just beyond the eastern margin of the ossuary from a spot within a radius of not over 5 ft., were found a polished stone "gorget," drilled with 2 holes; 2 small bits of copper plate; 2 small pieces of lead ore; white arrowpoint; a reshaped flint flake; the base of an arrowpoint; and many flint chips. Nothing was found with any of the burials in the ossuary, but with a small skeleton in one of two single graves just south of the ossuary, we found about 35 discoidal bone beads of good workmanship. These two graves lay oriented  $30^{\circ}$  east of north, beneath the south corner of the triangle of stone already mentioned. The smaller grave contained parts of a small skeleton and skull in disorder, lying with the scattered beads mentioned, in a deposit of pink dust. The larger grave contained part of



FIG. 6. STONE GRAVE IN MOUND NO. 9

a large skeleton extended at length, with skull northeast, in the pink ochre. The skull was crushed and the bones broken, and parts of other disarticulated skeletons near the center of the grave were above and beneath it, laid in transversely as if originally bundled bodies, one that of a child. Three skulls and a disarticulated skeleton were in the southwest end of the grave, all in fragments, for here the grave was broken in by the east wall of the great stone grave shown in figure 6.

This great grave, the preëminent feature of the southwest end of the mound, proved also the great disappointment of all our hopes, for it contained nothing but broken bones and one small arrowpoint. The great stones that had covered the tomb we found cracked and fallen, and beneath them were bones of all sizes and all ages, laid transversely across the grave,

with fragments of crania in the bottom, and *beneath them in spots the pink ochre*. The V-shaped cavity above the fallen roof-stones also contained similar bone fragments. The grave within measured 12 by 5 ft., and the stone covering about 13 by 7 ft., oriented  $10^{\circ}$  east of north and the height had been about 3 ft. The stones of the roof had no support on the sides other than that furnished by the earth at the edge of the grave and a few small stones. The bones from this grave and from the two graves near it, although badly broken, were in better condition than those of the bone bed.

Three feet under the east corner of the covering of the central pit, was a narrow grave containing a complete skeleton extended at length on its back with skull east. The feet and legs extended under the corner stone so that in digging the pit, which occupied less space than the covering, the builders of the mound did not disturb this grave. Nothing was found in the grave with the body except a little charcoal and burnt earth. The bones were removed in good condition, exhibiting less evidence of decay than those of the hill ossuary or those from the quadrangular graves here and elsewhere.

Just at the top of the slope, 15 in. under the southwest crest of the mound, which would be above the great stone grave, near 3 stones, was a bundled skeleton, and a lower jaw in poor condition without a skull. With this was a flint chip, a chipped flint and a block of dark red quartzite. Five feet further south, at a depth of 2 ft. below the slope of the mound, was a very hard skull which the jaw previously found above seemed to fit. There were some stones southwest of this last skull, and under it the complete skull of some small animal.

Altogether, contained in and beneath Mound 9, there were probably 120 skeletons, as follows: In and above the quadrangular grave in the northern end, 16; in the grave under the east corner of the covering, of the central pit, 1; in the central pit, 23; disturbed and scattered by the mound-builders in excavating this pit, (estimated) 6; in the old hill ossuary, 53 or more; in the great stone grave, probably 10; in the two graves near by, 8; and on the southwest slope, 1.

#### MOUND NUMBER 27

Mound 27 was a small asymmetrical mound not over 30 in. high, standing some way south of Mound 23 near what was once the shore of the slough. It was erected upon a bed of river shells and camp refuse, but beneath it was a quadrangular grave of the usual type, 8 by 7 ft., oriented  $10^{\circ}$  east of north, containing 10 skeletons, as usual unaccompanied by any material objects. The grave had been dug through a foot of shells and camp refuse and 2 ft. into the underlying gravel; 3 ft. below the camp level or a total depth of 5 ft. 6 in. below the summit of the mound. The excavated shells and gravel had been cast out on the southeast side of the grave as at Mound 23.

On the gravel in the bottom of the grave, extended at length with skull south, were skeletons of 4 adults and 1 child. In the northwest corner were 3 with skulls north, and a bundled or folded skeleton below one



FIG. 7. GENERAL VIEW OF MOUNDS AT ALBANY

them. One lay extended transversely across the north end as at Mound 17. Stones were heaped up at the eastern and western edges of the grave, extending some distance beyond the southern end, and further east was a heap of larger stones, which on removal disclosed nothing under them. A large firebed full of ashes and blackened earth lay just beyond the north-east corner of the grave, on the camp level.

The skulls were crushed into the gravel and the bones in an advanced state of decay, although the articular ends did not fall away in removal. Many of the bones, as those of the lower arm and lower leg, were cemented together through the action of lime contained in the gravel bedding.

Material collected from the camp level beneath the mound comprised potsherds of varied patterns, fragmentary bones of deer and probably of bison, turtle shells, an arrowpoint and flint chips. The river shells formed a bed one to two or more inches thick in which the shells lay sometimes "nested," and again both valves lay together unopened just as dredged up.

#### MOUND NUMBER 26

Mound 26 was a slightly larger mound, standing north of number 27, erected upon the same village level, but the usual quadrangular grave was not found, and the earth of the mound was a mixture of loam and dark surface sand of the locality without gravel. A skull in very poor condition was all that was found. This lay near the east base at the village level, and from this level we gathered potsherds, flint chips and an arrowpoint.

Figure 7 is a photograph showing many of the mounds mentioned in this paper before their removal. Mounds 20, 17 and 12 occupy about the center of the picture, with mounds 9, 8 and 7 on the hill at the right.

Reviewing the recorded facts entered from day to day in the field notes, detail of interment and mound structure stand no longer as isolated facts, but, interpreted, become a record of events in the life of a people, a basis for more or less accurate deduction. A remarkable feature of the present work in the Albany mounds was the almost total absence of any material objects with the dead, yet one find, that of the "monitor base" or "mound-builder" pipe, gives us a definite, if as yet conjectural, chronological horizon from which to work. For while the culture of this people seems less well developed than was that of the people of the Ohio valley, yet it will be conceded that this pipe, obtained by barter probably, fixes the period of the erection of these mounds as coëval with that of the Ohio culture, as remarked by Professor Thomas<sup>4</sup> with reference to other Illinois and Iowa mounds.

Potsherds of varied pattern, as already stated, were scattered over the surface beneath some of the mounds, yet no earthenware was found with any of the burials thought to be primary interments. The paucity of funeral offerings is open to one rational explanation, however, a suggestion advanced for what it is worth,—might it not be that funeral offerings were made, as they were in historical instances, upon the mortuary scaffold, or with the body in its temporary lodge, and that nothing was contributed later on when the bodies were given final interment in the mound?

The integrity of our workmen, who were farmers of the vicinity, was unquestioned, but to protect us, and to guard against the planting of any object in the exposed diggings, I camped night and day at the mounds, and Professor Paarmann was present at the opening of all important graves assisting in their examination. It would have been impossible for any object found to have been secreted and smuggled out without our knowledge, had there been any desire to conceal anything.

The long, wall-like mounds of the Wisconsin-Illinois district, none of which occur at or near Albany, contain interments of one or two folded skeletons near the center, also unaccompanied by anything in the nature of funeral offerings, although quantities of flint chips and flakes and an occasional finished implement may be found widely scattered over an excavated area above which the mound is built.

With regard to the older ossuary under the southern end of Mound 9, intruded upon by the builders of that mound, we can only cite the evidence of two periods of occupation, separated by an interval, short or long, the duration of which we have as yet no means of estimating. The absence of anything buried directly with the bodies might indicate kinship with the later people who built the mound, but that this inference necessarily follows should not be permitted to become a stumbling block in the path of any other interpretation.

On the terminating knolls of the mound-hills at Portage<sup>5</sup>, I found burials like this old ossuary at Mound 9, but covering not so large an area, and with no mound over them. I pointed out then that a situation could develop, like this at Mound 9, where the graves of an earlier and distinct people might be covered by the tumulus of a mound-building people who

<sup>4</sup> *Fifth Annual Report*, Bureau of Ethnology, pp. 38-39.

<sup>5</sup> *RECORDS OF THE PAST*, Vol. VII, Part I, p. 52.



followed them in the same district, and that a superficial examination or a blundering or hasty interpretation might result in deductions ascribing the tumulus interments and the other graves to one period and one people.

The orientation of the graves, regardless of the location of the mounds, was constantly nearly the same, north by  $10^{\circ}$  to  $30^{\circ}$  east. This was also the orientation of the grave in Mound 16 at Portage, as well as that of a large mound examined in the Apple River valley, near the village of Hanover.

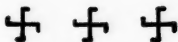
Between Albany and Galena, Illinois, is a missing link in mound exploration, although there are hundreds of mounds, many of them, as in the valley of Apple River, large structures still uninjured. This is a promising field, as is the valley of the Rock, neglected only because there is no money forthcoming to carry on the work.

Obviously the mounds examined at Albany were the final repository of bodies previously given temporary interment elsewhere or temporarily exposed on scaffolds as was customary within the historic period. There is sufficient resemblance in the mode of interment to justify the inference that all were the work of one people, covering a period of several years duration, while similarity in mound structure and disposition of bodies at Portage and East Dubuque indicates a distribution of the same people northward to the Wisconsin line, if not beyond.

As far back as we can go historically, which is not far, the district covered here was the habitat of the Kickapoos, or as it is earlier spelled Quicapaw, a people who made temporary disposal of their dead on scaffolds or in trees, making final burial in graves, sometimes covered with stones. In 1612 this people, with the Mascontins, are said to have been in southern Michigan, and in 1670 at the mouth of the Fox River of Wisconsin, not reaching northern Illinois<sup>6</sup> until after 1705. I believe there is no historical reference to any people as inhabiting the east shore of the Mississippi in the territory between the Wisconsin and the Rock earlier than this, although the Miami, thought to be a subdivision of the Illinois, are said to have claimed an origin west of the Mississippi and perhaps traversed this region in very early times.

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Epworth, Iowa.



POSSIBLE EVIDENCES OF A ROMAN THEATER IN DAMASCUS.—Rev. J. E. Hanauer in writing to the Palestine Exploration Fund mentions finding, south of the Street called Straight in Damascus, streets forming segments of concentric circles. The houses within the semi-circles are built on the top and sides of a great mound of débris. He says further "The discovery of these curiously concentric streets makes me think that they probably enclose the side of the theater of Roman times. It is not likely that Damascus was without such an edifice when other Greek-Roman cities, including Baalbek, had theirs."

<sup>6</sup> Beckwith, *Historic Notes on the Northwest*.

## PREHISTORIC PERIGORD<sup>1</sup>

IF WE wish to fix the date when the study of prehistoric times or prehistory had its first impulse, we must go back to 1829 when Dr. Schmerling appeared. Then for the first time, starting from the correct reflection, that we ought to find documents upon the unwritten history of the development of mankind more authoritative than those devised by historic tradition, this scholar of Liege opened the way for serious and conscientious research upon the origin of humanity. By his excavations in Belgium (1829-1833) there was opened to us a new perspective and the importance of inquiry concerning primitive man was demonstrated to us. The struggle which ensued to support that beginning of prehistoric researches was especially hard when, in 1830, the celebrated paleontologist Cuvier claimed that "there is no fossil man." Dr. Schmerling did not have the pleasure of seeing, during his life, the triumph of his fundamental views. After him, Boucher de Perthes took up his ideas and upheld them in spite of the hostility of Cuvier, Beaumont and all the French Academy. In 1859 only, Boucher de Perthes, whose persistent work not a single attack had staggered, found a powerful ally in the English Christy, who undertook extensive excavations in company with the French Lartet.

Boucher de Perthes died in 1868, and it was only 40 years later that there was erected at Abbeville a monument to the founder of prehistory. Meanwhile, Lartet, in France and Dupont in Belgium pushed on vigorously the study of prehistoric man and his industry.

In 1869 Gabriel de Mortillet, relying especially upon the discoveries of Lartet, established, and in an exemplary manner, the first chronology of the cave epoch. Classifying the particular types of implements according to the location of their beds he divided cave-dwellers into Chellean (Station of Chelles, Department of Seine-et-Marne); Mousterian (Le Moustier); Solutrian (Solutré, near Macon); Magdalenian (La Madeleine, Valley of the Vézère).

This chronology is still actually in force; we have, however, inserted the Acheulean (after St. Acheul, a bed in the department of the Somme) as well as the Aurignacian (after Aurignac, department of the Haute-Garonne). The progress of our knowledge will, without doubt, result sooner or later, in a modification of the Solutrian. If the legitimacy of the prehistoric is more generally recognized today, it is due to the energy of Mortillet. His works turned the interest of serious investigators more and more toward France, which more than any other single country was predestined to become the center of prehistory. And it is above all the department of the Dordogne, in the southwest of France and especially the Périgord, which was for oriental Europe, the essential point of departure for studies concerning the Palæolithic.

<sup>1</sup> Translated and slightly abridged from the French by Helen M. Wright. *Le Périgord Préhistorique: Guide pour les excursions dans les Vallées de la Vézère et de la Dordogne et pour l'étude de leurs stations préhistoriques.* 1911.

In very remote geological times, raging torrents eroded the limestone rocks forming the valleys through which the Vézère and the Dordogne flow today; in deeply scouring out their beds, each of these torrents formed grottoes and caverns. The eddies made natural shelters under the rocks, protected from inclement weather and at the same time near water courses abounding in fish and forests full of game; man located there, and found food and shelter, his conditions for existence.

We cannot say with certainty what was the native home of these prehistoric people. However, everything leads to the belief that the ancestors of the European, still encumbered with many traces of the gorilla, left his country, the Atlantis which has actually disappeared, to migrate into Africa and Europe. In advancing to the north, these savage hordes of hunters penetrated into the south of France; and, in the places where they found natural grottoes opening to the east and south, protected from the west and north winds, we find today traces of them; and it is because of these natural conditions of its topography that the Périgord comes to be known as the principal home of Palæolithic man. No other country of Europe offered, therefore, a refuge to so many tribes as these valleys of the Dordogne and the Vézère, and nowhere else can we study so well the development of man, his implements, his weapons, in brief, the succession of the stages of his evolution. In the valley of the Dordogne particularly there must have been a terrible struggle between the first inhabitants of the gorilla-like type of Neandertal and the Aurignacian emigrants from Asia, a strong, well-developed race. The stock of implements of that epoch, characterized throughout by lances and spearpoints bears silent witness to the defensive vigilance of these tribes.

The engineer whom we have specially engaged is instructed to prepare topographical charts of the places where excavations have been made and to make detailed maps for the principal beds. Just now, these summaries are related to the beds of Brine (department of the Corrèze) and of the larger part of those prehistoric habitations situated in the Vézère and the surrounding valleys. The grottoes and caverns deeply cut in the abrupt sides of solid limestone, of the Vézère give us precious documents upon the civilization of prehistoric times.

We have connected our secondary levels with the general levels of France. For a more exact representation of the principal beds, we employ a system of coördinates of which the zero points and the axes are determined by stakes and deep marks in the rock. The direction of the axes of the ordinates is at the same time, the line of the greatest slope, that is to say, perpendicular to the direction of the valley. This disposition allows, with any value whatever of  $x$ , for digging trial trenches in the direction of the ordinates and, during the work of excavation, the representation on coördinate paper the topographical, geological and archæological relations of these future beds. All the implements found are numbered, packed in paper and their location recorded in notebooks with the help of the coördinates and the height.

By this work, which takes time and pains, it is possible to fix and preserve exactly for science the position which the objects found occupied

with relation one to another and with relation to the actual formation of the ground.

Within the compass of a complete but limited guide, while giving the most possible details and yet keeping a practical size, we cannot treat thoroughly all the beds which comprise the plan of the whole. Our own excavations are too far from complete to make it opportune as yet to publish monographs upon each of these beds. We confine ourselves, then, to some provisional information upon special sites; we shall only publish in detail the results of excavations by others after the completion of our researches.

We come now to the description of these Palæolithic stations, commencing with the most important of the valleys:

No. 1. La Micoque (see the accompanying section showing the stratification). For the discovery and the first superficial excavations made at this spot, we refer to our two publications: O. Hauser, *Die neusten Ausgrabungen auf la Micoque, und ihre Resultate für die Kenntnis der Paläolithischen Kultur* (first part, with a map and 16 illustrations), and *Les fouilles scientifiques dans la vallée de la Vézère*, 1908, O. Hauser.

The prehistoric museum of Laugerie, so rich in the finds of the region as well as in plans, cuts and photographs of Palæolithic beds, gives to every scholar presenting an introduction, the opportunity of making studies and personal excavations in all the beds and all the epochs.

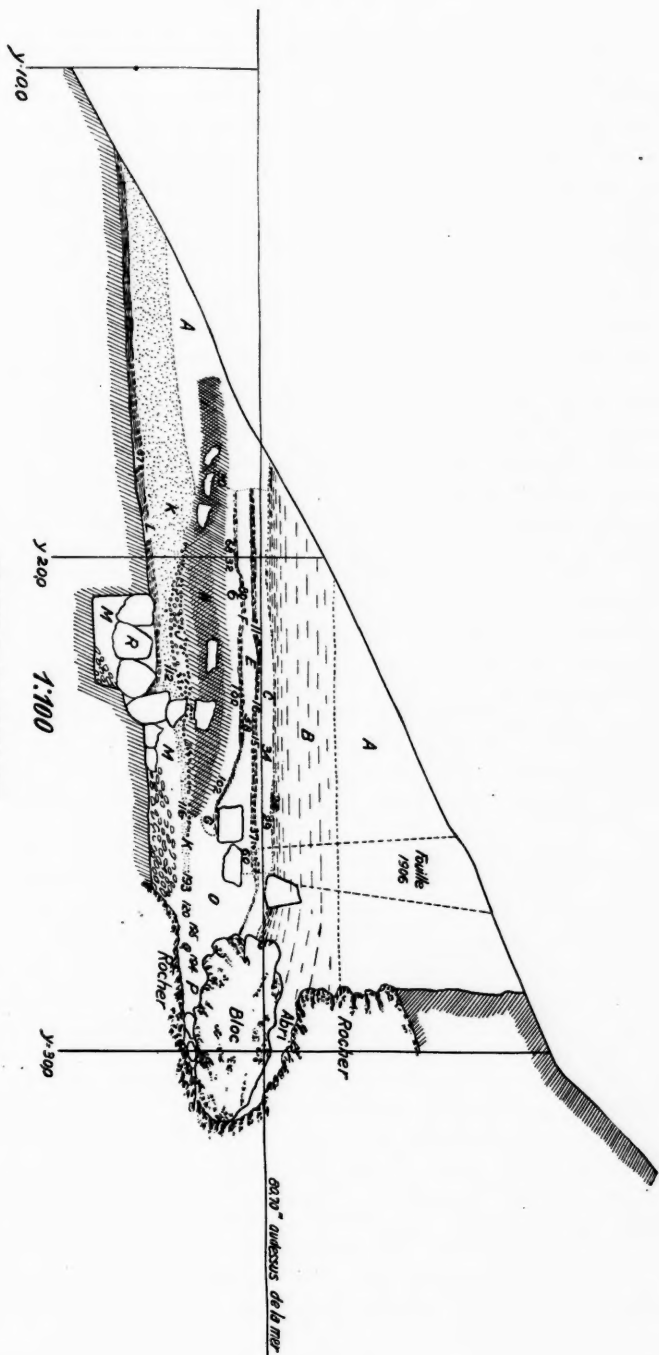
For what concerns the excavations undertaken at La Micoque during 1906, we refer to our monograph of which the first part appeared in July 1907. In this the situation of this important Palæolithic station is very exactly indicated, with plans and corroborative cuts. Detailed information about the objects recovered during the campaign of 1906 is found here also. The results of the researches of 1907 and 1908 are identical with those of 1906.

All the measurements which we take with great minuteness, were noted upon the large drawings of prehistoric topography begun during 1907 and will supply in the future a precise basis for the recording of the points explored.

The industry found in 1906 at the altitude of 268 ft. and 271 ft. shows, among the most beautiful Micoquian points exactly like the types recovered in the so-called "inferior bed", at 251 ft. The fauna, determined with care, has also much importance; it is identical at the bottom and at the top. We have proved the presence of the mammoth, of *bos primigenius*, of *bison priscus* and of *equus caballus*. The horse lived during the Micoquian age; his remains are very abundant.

In the lower part of the bed, the natural soil was found at 249 ft. From this level up to 251 ft. we encountered considerable fauna and cut flints in small numbers, but all resembling those from the top, showing the same characteristics as in the upper bed, except, however, the beautiful points which were carefully cached in the pockets, but—it is there a very important question—always mingled with the types which were encountered below.

In the same place where we discovered the beautiful points, we found small worked flints, the smallest of which measured only 0.7 in. Never-



PROFILE OF MICOQUE

Redrawn from *Le Périgord Préhistorique*



theless, this bed of small flints (mixed with the gravel) furnished us some double scrapers, identical in form and workmanship with those from *Laurie-Basse*.

From 251 ft. to 252 ft. we discovered a bed formed of hard gravel, containing some thousands of little fragments and small flints more or less cut and retouched. That bed showed scant fauna. Adjoining this, there was a stratum completely petrified, a kind of hard conglomerate, not sterile, however, as we thought at first. This bed (up to 256 ft.), on the contrary, constituted a true breccia 27½ in. to 3 ft. 7 in. thick filled with bones and cut flints.

Ten inches above, we found two little holes, made by ancient water currents, which contained beautiful flint concretions and water worn bones. These holes were 14 in. deep and were covered to a depth of 35 in. by a bed of flint implements with a rich fauna.

We recognized here the base of our excavations of 1906 at 261 ft. and 264 ft. The industry and the fauna continue the same; there is no difference in the workmanship of the flints of 261 ft. and 251 ft.

An interesting discovery was made on May 30, 1906, at 253 ft. It was that of a large worked bone. Later, we encountered numerous bones bearing traces of work and of utilization, among them some bodkins, polishers, etc.

A round piece of limestone, hollowed in the middle, probably served as a cup.

Although there was never a question of the existence of hearths at *La Micoque*, we found one May 29, 1907 at a height of 251 ft. to the south-east of the stratum explored, and another in March, 1908, at 259 ft. in a yellowish-green bed extending along the shelter.

We have divided the objects collected at *La Micoque* into 7 principal classes:

Almonds (almonds with continuous edges, almonds with shoulders and those with a flattish curve). Discs. Points (regular Mousterian points and those with a beak). Borers (with pointed shape or with the point widened and even blunted). Scrapers (among them concave, convex, rectangular, triangular, discoidal, straight and denticulate). Little cut flints (pieces cut in points, denticulate pieces, little discs and small plates delicately retouched). Finally, we have the worked bone which was mentioned above.

According to our researches which have been conducted and which are continuing with very great attention, it is unquestionable that the bed of *La Micoque* comprises only a continuous level without temporary interruption between the industry of the bottom and that of the top. There was, in that slope of 22° from the foot to the top, only one station, characterized throughout by the same industry and the same fauna.

It is difficult to class *La Micoque* in our Palæolithic chronology. A large number of objects, the "bouchers" (coups de poing)<sup>2</sup> and the amygdaloid points, call to mind the Acheulean implements; but there are others

<sup>2</sup> Dr. Sollas in *Ancient Hunters* fittingly suggests the term "boucher" as the equivalent of the French term "coup de poing." (See pp. 74 and 75.) [Editor.]



which bear Mousterian characteristics, while others are absolutely Aurignacian. The discoveries of future years will, perhaps, give us the solution of this problem. It seems certain that the station of La Micoque is much older than all the beds near Laugerie. The waters which produced the erosion of the shelter under the rocks of Laugerie seem to have destroyed the immense shelter of La Micoque which has reached us only in a very fragmentary form. The character of cutting of the flints of La Micoque is perhaps pre-Mousterian, and in the bed J we see a distinct case. The little worked flints of the bed were surely worked in the same stages of abode as those of all the other beds, but more and more I am convinced of the coexistence of two different races at La Micoque. The same fact has been demonstrated by Combe Capelle upon the occasion of the discovery of *Homo Aurignacensis Hauseri* (1909). The little tools of the bed J were not made by the same tribe which cut the amygdaloid points, so fine and marvelous, but they were made in the same epoch by the remnants of a population much more primitive than the Micoquians, perhaps by slaves still eolithic. In many places we have reached a depth of 26 ft.

The secondary coloration and the density, often relatively slight, of the flint which, apparently, has undergone many transformations in the course of the ages, have obliged us to make qualitative and quantitative analyses first, of the mineral matrix, then of the core often still present and nearly black, and finally of the brown incrustation. The qualitative analysis showed the presence of fluorine, iron, aluminium, calcium and potassium.

It is on the terrace where the persons who excavated superficially up to 1905 claim to have found the lower bed, that we made our trench.

The articles published upon the preceding superficial excavation make it our duty to give, once for all, the exact stratigraphy of that important bed.

La Micoque is not, as has been said, a station in the open air, but a shelter under the rock. That shelter which our excavations have brought to light, is immense and, thanks to the trench, all the beds are at present clearly visible. The section of our trench is 62 ft. long, 22 ft. deep and about 6½ ft. wide. It took us a month, working with 8 laborers to complete that digging; two miners were specially charged with breaking up the breccia.

This very expensive work has given us a scientific result of the first order. We have been able to excavate and study each of the beds which was presented; the flints, and the bones collected were immediately numbered and put in cases also numbered. Our surveyor, always present, took all the necessary measurements and marked each bed while noting the contents. We took photographs of every new aspect of the excavations. Certain days, because of the difficulties, we could not advance much more than 3 ft. This work of which we give the stratigraphic section, was carried on with the greatest possible precision.

For the other stations already excavated, or which we propose to excavate, we shall publish the results in the general report which we shall prepare and we wish here to give only a resumé of the stratigraphy. Our section to hundredths gives:

At A, some rubbish coming from the plateau overhanging the shelter.

At B, C, and D, beds found by us in 1906; it is at D that we found the rich industry of which we gave the description in our first work, published in July 1907.

Beside the 3 sections  $x=23$ ,  $x=22$  and  $x=21$ , we have taken 6 others, meter by meter, between the number 96 and the shelter.

Here we may summarize the result of our observations: the so-called "inferior bed" is indicated upon our section by the letter J; the bed called "superior" corresponds to the beds B, C, D, discovered by us in 1906; now, in March 1908, fortunately we found again in K, P, Q that same bed with a fine industry, absolutely at the same level as the bed J (little flints). The lower bed corresponds to our bed J, K, L, which loses itself in the beautiful bed P, Q; that last comprises beside very beautiful scrapers and points, the little flints mentioned above.

The distance in height which separates the two beds of fine industry is about 5 ft.; we shall give in our next publication the causes and reasons for this difference of level; we limit ourselves for the moment to the statement that the industry of the two beds is absolutely identical; also, the fauna.

The objects removed at 83 and 90 in the bed J (little flints with gravel) form a considerable part of the lower bed of preceding excavations, but they are found absolutely at the same level at the points 193, 194, 195, and 120 of the bed P, Q, which gave beautiful points, superb scrapers, many superior to the pieces gathered in B, C, D.

The very superficial diggings carried on by the earlier excavators evidently did not allow them to see and study this interesting bed. We were able to do so at the beginning of 1908.

At the beginning of our excavations in 1906, we met with the beautiful industry in B, C, D, at the numbers 37, and 29 of section  $x=23$ ; at number 35 of the section  $x=22$ ; and at numbers 31, 32, 36 of the section  $x=21$ . Everywhere we found an industry absolutely identical with that of numbers 120, 193, 194 and 195. We showed after making our trenches that there was only a single bed there.

It is at the point N that we found again the débris of the old roof of the shelter, which projected consequently as high as that point. It will be easy, then, after our work and our observations, to reconstruct completely the celebrated station of La Micoque. Having numbered all the pieces recovered, even the fragments of breccia, we shall be able to place each flint strictly in the same spot in which it was found by us.

Legend for the stratigraphic section of La Micoque:

A. Rubbish.

B. Bed with a little flint and scanty fauna, formed of a reddish-brown earth; richer at the base than at the top.

C. Greyish-yellow breccia, containing some flints and bones.

D. Grey earth with flints and fauna, bottom of the excavations of 1906.

E. Breccia similar to that at C.

F. Reddish-brown bed with flint and abundant fauna.

G. Reddish-brown breccia with flints and fauna.

H. Breccia, very hard at the center, with few flints and scant fauna; the surface and the base of the breccia less compact, containing more flints and fauna.

J. Gravels with small and large flints, nearly similar to eolithic types, but always of the same horizon as the better amygdaloid points of the excavations of 1906-1908; scant fauna.

K. Greyish-brown bed with flints and bones.

L. Brown earth, with flints and bones.

M. Brown earth with gravel, without implements (sterile bed).

N. Little débris fallen from the ceiling of the ancient shelter.

O. Gravel and brown earth, sterile.

P. Beautiful amygdaloid points and scrapers, mingled with flint similar to those of J; scant fauna.

Q. Black ashes.

R. Blocks of débris from the ancient shelter.

No. 4<sup>3</sup>. here someone showed us in 1906, from a small tomb still visible, the fragments of a skeleton of the Bronze Age.

No. 6<sup>4</sup>. Here the road destroyed a little Magdalenian station furnishing throughout small knives and plates of that epoch.

No. 6a. The pitfalls. Very near Laugerie-Haute we had the luck on May 20, 1907, to discover 21 cylindrical holes, containing Solutrian flints. It was an extraordinary work to empty all these holes which had every appearance of having been pitfalls. The terrace which existed at that spot was the only road by which animals could go to drink at the edge of the Vézère; this narrow passage was easily barred and the animals were then forced to traverse the space which the holes, arranged in quincunx, occupied, where some today nearly break their legs.

No. 7. A block of débris upon which were found Magdalenian flints.

Nos. 8, 9, 10. Forming the celebrated classic station of Laugerie-Haute with immense beds of the best Magdalenian and Solutrian. Property of M. O. Hauser. Systematic excavations have only commenced here.

At this time I ought to mention that I have divided the old designation of "Laugerie-Haute" into two parts:

Laugerie-Haute, Nos. 8, 9, 10, where rich Magdalenian deposits were found; and

"Intermediate Laugerie" (formerly also designated as Laugerie-Haute) Nos. 11, 12, 13, 14 (property of M. O. Hauser) and Nos. 15 and 16 which give us throughout magnificent Solutrian with beautiful laurel leaf points (*feuilles de laurier*) and shouldered points (*pointes à cran*). No. 15 furnished in 1907 in a thin Magdalenian bed a human skeleton poorly preserved and carelessly exhumed.

Nos. 18-20. No 18 a place called "Les Marseilles" at Laugerie-Basse, is remarkable for its great abundance of flint instruments very thin and beautiful, which it has given up and for the discovery of a magnificent stone lamp.

<sup>3</sup> Less than half a mile southwest from La Micoque.

<sup>4</sup> Close to No. 4.

But it is at Laugerie-Basse itself, in a place called "La Grange" No. 20, that the best results have been obtained, as well from a scientific point of view as from the point of view of the collector. We found there quantities of the most delicate flint and bone implements, as well as engravings on reindeer bone and deer horn. The principal piece discovered at that spot is a block of stone 20 in. by 18 in., weighing 121 pounds, and richly adorned with drawings. Among the outlines which we noted, we easily recognized the representation of 5 complete animals magnificently drawn, and 3 other incomplete animals. We identified: a galloping horse; 11.4 in. long; a bison, 11.8 in. long; a bear, 9.8 in.; an ibex, 10.6 in.; two antelopes, 7.8 in. and 9 in. The place where we found this work of art is the most interesting which has ever been encountered in middle Magdalenian. We discovered at first an enormous block 9 ft. long, which bore traces of work still visible.

All around this block were rich Magdalenian deposits with beautiful bone implements. The bed began at 240 ft. and continued in two parts to 236 ft. In pursuing the explorations of that bed, we found at the bottom 3 benches consisting of large stone, all with traces of work; little by little we brought to light 14 of these benches, one of which was hollowed so as to have served perhaps for a cup. All these benches were between 236 ft., and 235 ft. At the foot of that site, at about 236 ft., we uncovered the beautiful engraved stone discussed above, and close by a very distinct hearth. One can almost imagine himself in the midst of the people of the Magdalenian epoch, working around a large block with a fire burning at a little distance. Each workman had, beside the bench which served all for the larger work, his particular small bench. These workmen were veritable artists; they were not occupied with working flints, they cut finely, and with rare perfection, the bones which we have recovered in such large numbers. That workshop was unique, in fact, reserved for the manufacture of implements of bone and horn. The workshop of the flintworkers was discovered in February, 1907, further north.

No. 23 (at Laugerie-Basse). A site where M. Massenat found a skeleton and objects of Magdalenian industry; the man was crushed.

Nos. 25, 26, 27, at Galau, Aurignacian stations.

No. 28. The large cave of La Gorge d'Enfer; it was rather a religious cave than a cave for habitation.

No. 29, behind No. 28, a little grotto which seemed to be in communication with No. 28, and which yielded a few flints.

No. 30. Calprenade, a station probably Magdalenian, emptied more than 20 years ago.

No. 31. Bil bas, a shelter under the rock with a little Aurignacian station discovered in 1907.

No. 33. Cro-Magnon. In 1868 there were found here the skulls and fragments of skeletons which have given the name to the "race of Cro-Magnon." For the stratigraphy, it is difficult now to verify the beds, as they have been disturbed and destroyed by a large number of excavators. See the publications of Girod, Lartet, Christy, etc.; for the anthropology, see the notes upon the race of Cro-Magnon in the works of Klaatsch.

No. 37. Le Chateau des Eyzies, X century. Under the foundations, a dwelling of the Magdalenian epoch.

No. 39. Chez Audie. Lower Aurignacian.

No. 40. Grotte des Eyzies. (Magdalenian, engravings on bone, ivory and stone).

At the fork of the roads: road for La Mouthe, a grotto with drawings and paintings; a little further, the grottoes of Font de Gaume and of Combarelles. These 3 grottoes with paintings and drawings can be visited without permission; at the entrance of each is the house of the guardian.

In following the road which rises to the northeast above the valley of the Beune, in the direction of Tursac, there is found, upon the right bank of the Vézère, the celebrated station of La Madeleine, which has given the name to the last epoch of the quaternary, Magdalenian. See Girod, *l'Age du renne* and Lartet and Christy, *Reliquiae aquitanicae*.

About 6 miles from Eyzies, higher than La Madeleine, we find ourselves at Moustier:

Nos. 43 and 44. During the month of August, 1907, we worked at Moustier also; first upon a corner of the terrace and then at the middle of that terrace, at the entrance to the cave of Lartet and Christy and along the terrace. The finds typical of that classic station have given the name "Mousterian" to that epoch. At the same time, we commenced the methodical excavation of a new and final shelter at the level of the road. That shelter, entirely unworked, furnished us with fine pieces of the types of the Achulean II, with "bouchers" thin and exceptionally long (7 in. and 9.4 in.), scrapers, plates, points and discs of a rich variety.

Upon the terrace we had the good fortune to find beds clearly intact, which permitted the thorough study, with all the care desirable, of the Mousterian question. The industry is different here, at the altitude of 265 ft. from that which was encountered at 222 ft. to 225 ft. As finds, we have good points, plates, scratchers and scrapers. One of these last is 0.64 in. long.

It was on April 10, 1908 that we made at Moustier (a shelter at point 44) the crowning discovery of a skeleton of which the skull was particularly well preserved (*Homo Mousteriensis Hauseri*). We made haste to establish this important find in the presence of 6 officials of the region. The old soil was recognized at 231 ft.; the beds were absolutely intact. The skull was found at 228 ft. surrounded by burnt bones, fragments and cut flints.

Exact measurements, notes and photographs were made in the presence of the witnessing officials (see the publications of Klaatsch and Hauser).

From the intact Mousterian bed upon the terrace (No. 43) we obtained a worked bone which had been used.

No. 45. Longueruche. This little village 1640 ft. from Moustier contains a Magdalenian station. The excavations have yielded flint objects of remarkable workmanship different from those of Lauger-Basse, bone harpoons, carvings and needles. Below that Magdalenian bed, separated by a large sterile stratum, we discovered a horizon of a very rare *facies* for the Périgord, a pre-Chellean which will be excavated ultimately.



No. 47. Le Ruth, Aurignacian and Solutrian.

No. 48. Fongal, town of Peyzac, upper Aurignacian, engraved and sculptured stones.

No. 46. Combe Capelle, town of Monferrand du Périgord, valley of the Couze. Celebrated station of *Homo Aurignacensis Hauseri*, 1909 (see publications of Klaatsch and Hauser).

No. 49. Aurignacian finds near Thenon.

Nos. 50, 51, 53. La Rochette. Town of St. Léon on the Vézère. An immense shelter in process of exploration, 1910, 1911 and 1912, with very interesting superpositions of Acheulean, Mousterian, lower and upper Aurignacian. In 1910 an Aurignacian skeleton without the skull was found.

Opposite on the left bank of the Vézère:

No. 52. Sergeac. Upper Aurignacian with bone, ivory and flint implements of great beauty.

Nos. 54, 55 and 55a. Badegoule, above Cerne, town of Condat-Bersac, Solutrian stations. The workmanship of the flints of that Palæolithic habitation is very delicate. The laurel-leaf points and the shouldered points are incomparable for delicacy. In one of the shelters of Badegoule there was discovered in 1903 a skull of a child and during my systematic researches in 1910, I also, uncovered fragments of a child's skull. Excavations were continued in 1911.

No. 57. La Baloutie. Excavations not commenced.

No. 58. St. Avit Senieur. An unwrought shelter not far from station 46 of Combe Capelle, will be excavated in 1911 and 1912.

No. 59. Miremont. The shelter of Faurelie, near the railroad station of Mauzens-Miremont, presents an Aurignacian bed.

No. 60. Aux Cailloux (an unexcavated shelter, Aurignacian).

O. HAUSER.

France.

DEATH OF HERBERT RISLEY.—On September 30, 1911, occurred the death of Sir Herbert Risley, Secretary of the Judicial and Public Department of the India Office, and President of the Royal Anthropological Institute of Great Britain and Ireland. After his university training at New College, Oxford, he entered the Indian Civil Service, and eventually was sent to Bengal, where the largest part of his anthropological work was done. Throughout his life he served in various capacities connected with the Indian service. His studies of Indian anthropology aided him there by giving him sympathy with the people, and, in turn, his official position gave him opportunity for further investigation. Among his publications *The Tribes and Castes of Bengal* is the most noteworthy. He firmly believed that it is only right "to teach the anthropology of India to the men of the Indian services." It may further be said that "his most valuable achievement was the lesson he assiduously taught and practiced, that the best basis for progress is the careful and disinterested study of existing institutions."





EGYPTIAN SCENE SHOWING CONE ON THE HEAD OF THE DEFUNCT

## SUGGESTION AS TO THE SIGNIFICANCE OF THE CONE ON THE HEAD OF THE DEFUNCT IN EGYPTIAN JUDGEMENT SCENES

**T**HE cone upon the head of the defunct, as represented in some of the head pieces to the chapters in the *Book of the Dead*, attracted my attention in a study of Egyptian religions from the standpoint of symbolism.

The significance of the cone is not known, says Budge, although some writers have considered it to be simply a form of headdress. The deep spiritual significance of the Egyptian teachings, together with the symbolic or hieroglyphic method of transmitting their knowledge to posterity, led me to consider this "cone" as also conveying some idea worth the effort of an attempt at interpreting its meaning.

To secure the perspective necessary to the view to be disclosed, one must abandon the idea that the ancient Egyptians were animal worshipers, and come to view with Budge, Spineto, Renouf, and others, the monotheism of this ancient race.

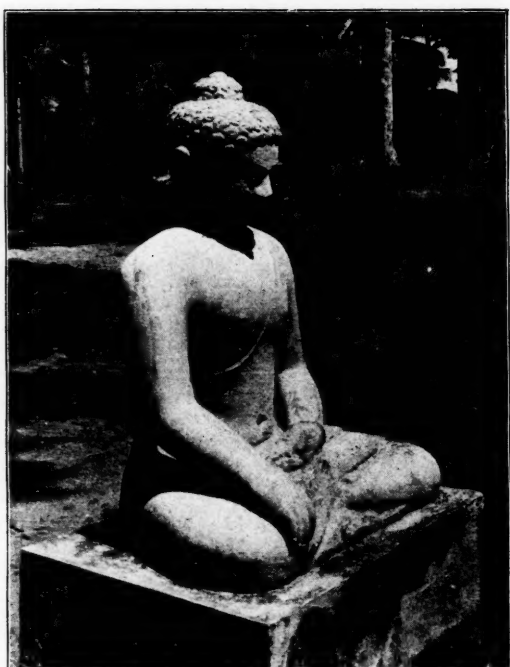
Iamblichus says regarding this: "Before the things that really are, even the first principles of all things, is One Divine Being, prior even to the first God and King, abiding immovable in the aloneness of his own absolute unity. For neither is Intelligence, nor any principle else intermingled with him, but he is established an exemplar of the God self-begotten, self-produced and only begotten, the One truly God."<sup>1</sup>

With so lofty a conception of God, we are prepared for a noble conception of man.

Lactantius says "From the two natures, the deathless and mortal, He made one nature—that of man—one and the self-same thing; and having made the self-same (man) both somehow deathless and somehow mortal, He brought him forth, and set him up betwixt the godlike and immortal nature and the mortal, that seeing all he might wonder at all."<sup>2</sup>

<sup>1</sup> *The Egyptian Mysteries.* By Iamblichus. Translated by Alexander Wilder, p. 252.

<sup>2</sup> *Thrice Greatest Hermes.* By G. R. S. Mead, vol. iii, p. 245.



CURLED HAIR ON THE HEAD OF A YOGEE

With a lofty conception of God, and with the idea of immortality or a "deathless" part of man, we are prepared to look at the ancient Egyptian moral code, and learn of "The Way to Deathlessness."

"Right was thy thought, O thou! But how doth 'he who knows himself, go unto Him', as God's Word (Logos) hath declared?"

"And I reply: the Father of the universals doth consist of Light and Life, and from him, man was born.

"Thou sayest well, (thus) speaking. Light and Life is Father-God—and from Him man was born.

"If then thou learnest that thou art thyself of Life and Light, and that thou (only) happen'st to be out of them, thou shalt return again to Life. Thus did Man-Shepherd (Poemandres or Pymander) speak.

"But tell me further, Mind (spark of Divinity) of me, I cried, how shall I come to Life again . . . for God doth say: 'The man who hath Mind in him, let him learn to know that he himself (is deathless).'"<sup>3</sup>

The "Way of Deathlessness" is the path of self-knowledge. The disciple or initiate (symbolized by the defunct in the Egyptian Judgment Scenes) cannot believe it is for him, he cannot quite understand that Mind (the Divine Spark, *i.e.*, the Individual Intelligence) is in him, or rather is himself. The disciple may believe but he does not know.

<sup>3</sup> *Thrice Greatest Hermes*. By G. R. S. Mead, vol ii, p. 13.

Here comes in the moral code such as may be gleaned from a study of Chapter CXXV *Book of the Dead*. The knowledge necessary to the initiate must be preceded by moral purification. The whole nature must be changed. In other words the development of the spiritual faculties and powers depends upon morality, a life based upon Nature's laws. Such a life, it was taught, would lead to the natural evolvement of the spiritual part of man's nature; and the symbol, that the spiritual faculties and powers had been developed by the defunct, is the cone on top of the head of the aspirant for spiritual life before the throne of Osiris.

The "glad tidings" seem to have been the heritage of those who "lived the life to know the doctrine" in all ages.

The curled hair on top of the head of the yogees of the far East, Buddha for instance, indicates "the hidden fountain issuing from a concealed brain" or in other words to a highly developed spiritual nature. Some times the symbol is a dot in the center of the forehead.

Now this again refers to the so-called "third eye", not an anatomical eye in the center of the forehead; but the "inner eye" or a focal point in the brain toward which the physical vibrations may be directed by the will of the "disciple on the path," thus enabling him to harmonize or unify all the vibrations or demands of the body, and to persist in the living of the life, that he may gain a greater knowledge of spiritual matters, in order to render a greater service to humanity.

This is the law of spiritual progress. This is briefly one interpretation of the cone on the head; the top knot on the head of the yogees; and the meaning of the inner eye.

THOS. M. STEWART.

Cincinnati, Ohio.



OAK PILE FROM ROMAN WALL AROUND LONDON.—Early in January an oak pile taken from the foundation of the Roman wall which bounded London on the south side was placed in the Guildhall Museum. It was discovered on a site on Lower Thames street. "At a depth of about 30 ft. there were found 3 layers of Roman red tile, characteristic of the period, embedded in mortar mixed with pounded tile. Beneath this were 3 layers of roughly-hewn pieces of Kentish rag, and below this, again, were some huge balks of timber about 2 ft. square, and more than 5 ft. in length, lying irregularly across the line of the wall. Between these beams were placed short upright piles and the only one that was brought out intact has been placed in the Guildhall Museum." This discovery defines the course of the wall at this spot as slightly different from that which is conjecturally drawn in the Map of Roman London in the Victoria County History.

## BOOK REVIEWS

### ANCIENT HUNTERS<sup>1</sup>

SO MUCH of value is being daily discovered relating to pre-historic man—when, where and how he lived—that we gladly welcome a resumé of the subject to date, such as we have in the last volume by Prof. W. J. Sollas, under the title of *Ancient Hunters and their Modern Representatives*. The work, however, is more than a résumé, for many conclusions are drawn, which, although they may be provisional as the author admits, yet are valuable mile posts along the line of archaeological advance.

As the title suggests, the method of presentation is to give a description of the different early cultures and compare them with their nearest apparent living representatives. Although the separation in time and space is so great that correlations are of somewhat doubtful value, yet they are very suggestive and give us the best possible idea of the manner of man who lived in glacial and early post-glacial times.

Evolution is slightly touched on and regarding it Professor Sollas says: "In reviewing the successive Palæolithic industries as they occur in Europe, I find little evidence of indigenous evolution, but much that suggests the influence of migrating races; if this is a heresy it is at least respectable and is now rapidly gaining adherents" (p. vii).

The various phases of the Great Ice Age, being the calendar stick on which the early stages of man's development are recorded, are discussed in the first chapter. Professor Sollas dwells specially on the sequence of glacial advances and retreats in Europe, basing his deductions largely on the investigations of Professor Penck, whose estimates of the age of the different glacial gravels is greater than many geologists believe.

In the chapter on *The Antiquity of Man* the author briefly presents both sides of the discussion as it now stands regarding the relation of *Pithecanthropus* and *Homo sapiens*. As regards eoliths he feels that the recent discussion of their origin by natural means renders the theory of their artificial manufacture untenable thus eliminating all evidence of the existence of *Homo sapeins* prior to Pleistocene time.

In the two following chapters the Tasmanians, the lowest form of our modern hunters, and the men of the lower Palæolithic are considered. Provisionally the Palæolithic series is divided as follows (p. 99):

Upper Palæolithic .....	{	Magdalenian	stage
		Solutrian	stage
		Aurignacian	stage
Middle Palæolithic.....		Mousterian	stage
		Acheulean	stage
Lower Palæolithic .....		Chellean	stage
		Strepyan	stage
		Mesvinian	stage

<sup>1</sup>*Ancient Hunters and their Modern Representatives*. By W. J. Sollas, D.Sc., LL.D., F.R.S. etc. Pp. xvi + 416. Illustrations and folded plate. Price \$4.00 Net. Macmillan and Company, London. Imported by The Macmillan Company, New York.

Among the implements used by lower Palaeolithic man and also by the Tasmanians is a large rough tool (Fig. 1 and 1a) "made by striking off with a single blow a thick flake from a larger block of stone, and dressing the side opposite the surface of fracture by several blows directed more or less parallel to its length." The French call this implement a "coup de poing", and the Germans a "Beil" (axe) or "Faust Keil" (fist wedge). In English we have no name for it so Professor Sollas fittingly suggests "boucher" "thus honoring the memory of Boucher de Perthes, who was the first to compel the attention of the scientific world to these relics of the past" (p. 75).

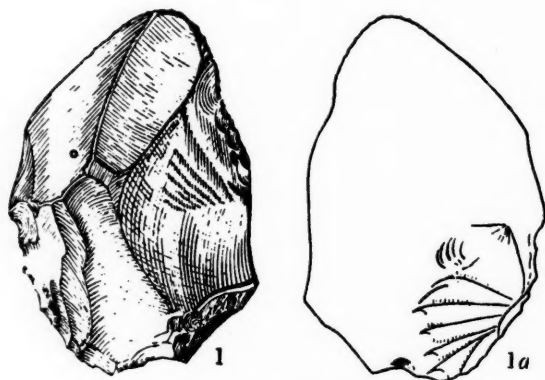
As we find in the early stages no implement "which can be regarded as a weapon" Professor Sollas concludes that they doubtless used spears made exclusively of wood such as the Tasmanians use with remarkably deadly effect.

When we come to the origin and diffusion of the different early cultures we reach fascinatingly uncertain ground. For instance regarding the Chellean culture the author remarks: "The Chellean industry probably originated at some particular center and then traveled in a slowly enlarging wave over the entire world; it is even possible that fresh industries had already arisen while this wave was in progress, and that these were similarly propagated, so that after a sufficient interval of time all the various palaeolithic industries might have existed simultaneously in different parts of the earth" (p. 120). Such a course of events is possible but is it not equally probable that these more primitive and less differentiated forms may have originated spontaneously in different parts of the world?

Beginning with the Mousterian age of the Middle Palaeolithic we have more definite knowledge of the men, their implements and mode of life. Skeletal remains are comparatively abundant so that we know something of his brain capacity if not his actual mental capacity. We also learn something of his religious beliefs as indicated in some of the burials where offerings and food are found accompanying the interment. These were doubtless for the use of the deceased in the next world. "It is almost with a shock of surprise that we discover this well-known custom, and all that it implies, already in existence during the last episode of the Great Ice Age" (pp. 146-147).

The Australians seem to be the nearest representatives of the Mousterians so a chapter is devoted to the Australian aborigines. Regarding them he says: "The Australians are a lower race than the Neandertal; at the same time, they are more closely allied to it than any other; and we may regard the Australian as a survival from Mousterian times, but not as a direct descendent of the Mousterian races of Europe" (p. 162). "It is tempting to suppose either that the inferior tribes of the Neandertal race were driven by stress of competition out of Europe, and wandered until they reached the Australian region; or that at some early time they occupied a tract of land extending almost continuously from Europe to Australia, and have since been everywhere blotted out except in their southern home. We cannot appeal to the wide spread distribution of the earlier forms of Palaeolithic implements in favor of either theory, for, as





A TASMANIAN "BOUCHER"

From *Ancient Hunters*

cannot too frequently be repeated, the possession of a common culture is no proof of community of race. To suppose that it is so is to repeat the error of those philologists who have endeavored to identify races by language. On the other hand, the sporadic occurrence of individuals with Australoid characters in the Pacific, and the existence of related races such as the Veddahs and the Ainos in areas so widely separated as India and Japan, is highly suggestive, and would seem to indicate the extension of a primitive race allied to the Australian over a great part of the old world" (p. 208).

In the chapters on the *Aurignacian Age* and *The Bushmen* very striking resemblances in customs and art are sighted. The numerous examples of the high artistic skill shown in the cave paintings of France and their remarkable counterparts in the cave paintings of the Bushmen is most striking. From these similarities, Professor Sollas admits we can draw no conclusions as to a close blood relationship. Fortunately, however, another line of evidence is open. Although the Aurignacians left no accurate paintings of the human form they did leave numerous carvings in the round showing such marked physiological similarities as steatopogy and a "remarkable elongation of the *labia minora*."

Magdalenian man and the Eskimo seem closely related. "The osteological characters of the Eskimo, which are of a very special kind, are repeated by the Chancelade skeleton [a Magdalenian type] so completely as to leave no reasonable doubt that it represents the remains of a veritable Eskimo who lived in southern France during the Magdalenian age" (p. 376).

Professor Sollas concludes:

"If the views we have expressed in this and preceding chapters are well founded, it would appear that the surviving races which represent the vanished Palæolithic hunters have succeeded one another over Europe in the order of their intelligence; each has yielded in turn to a more highly developed and more highly gifted form of man. From what is now the focus of civilization they have one by one been expelled and driven to the uttermost parts of the earth; the Mousterians survive in the remotely



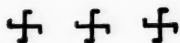
related Australians at the Antipodes, the Solutrians are represented by the Bushmen of the southern extremity of Africa, Magdalenians by the Eskimo on the frozen margin of the North American continent and as well, perhaps, by the red Indians. It is a singular fact, when considered in connection with the claims sometimes asserted in favor of the dolichocephalic skull, that in each of these ancient races, marked by so many primitive characters, a long head is distinctive. Perhaps this also is to be numbered among the primitive characters" (p. 382).

Another deduction, although not archæological, which Professor Sollas makes is worth quoting as showing a philosophy of government based on man's development.

"What part is to be assigned to justice in the government of human affairs? So far as the facts are clear they teach in no equivocal terms that there is no right which is not founded on might. Justice belongs to the strong, and has been meted out to each race according to its strength; each has received as much justice as it deserved. What perhaps is most impressive in each of the cases we have discussed is this, that the dispossession by a new-comer of a race already in occupation of the soil has marked an upward step in the intellectual progress of mankind. It is not priority of occupation, but the power to utilize, which establishes a claim to the land. Hence it is a duty which every race owes to itself, and to the human family as well, to cultivate by every possible means its own strength; directly it falls behind in the regard it pays to this duty, whether in art or science, in breeding or organization for self-defence, it incurs a penalty which Natural Selection, the stern but beneficent tyrant of the organic world, will assuredly exact, and that speedily, to the full" (p. 383).

The volume is most valuable, full of interesting facts, deductions and suggestions. A wealth of illustrations adds greatly to the attractive appearance of the book as well as its value.

FREDERICK BENNETT WRIGHT.



## SOME OLD EGYPTIAN LIBRARIANS<sup>2</sup>

A CHARMINGLY written little book by Ernest Cushing Richardson, librarian of Princeton University, is entitled *Old Egyptian Librarians*. The subject is rather unique and the treatment equally so. The position of the librarians in ancient Egypt was very exalted and their power, both in religious and civil government, great. This was in part, at least, due to the fact that only a very limited number of the people were able to read and write.

Beginning with the god of libraries, Thoth, "the revealer and interpreter of the gods to men" and his wife Seshait called the "Lady of libraries"

<sup>2</sup> *Some Old Egyptian Librarians*. By Ernest Cushing Richardson. Pp. viii + 93. 75c. net. New York; Charles Scribner's Sons. 1911.

the author passes down the ages of Egyptian history mentioning the librarians of whom we have records, indicating their ideals, duties and the powerful influence which they exerted.

In a book of this character it seems to us unfortunate that the author felt it incumbent upon him to go out of his way to cast doubt on the accuracy of biblical history as he does on page 37 where he says: "It is in this Hyksos time that Joseph was in Egypt, if indeed he ever was or was in Egypt," and again on pages 44 and 45 where he says, "This brings things down to the time when Moses lived, if he did live" and "while Aaron by the same token, if he was, and if he was what he was said to have been." Such insinuations seem specially out of place in a book in which less well-established persons are accepted without hesitation and placed on scant evidence in the list of noble librarians.

F. B. W.

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#### DEATH OF HENRY W. HAYNES.

The death of Henry W. Haynes, after a short illness, at his residence in Boston, on February 16, removes one of the most accomplished archaeologists of our time and country. Professor Haynes was born in Bangor, Maine, September 20, 1831. He received the degree of A. B. from Harvard University in 1851 and of A.M. in 1859. After practicing law for a few years he became Professor of Latin, and later of Greek, in the University of Vermont, 1867-1872. Having means of his own, he determined to devote his attention after that time to archaeology. In pursuit of this purpose he made extensive investigations in Europe, Egypt and elsewhere, being the first to establish the existence of palæolithic man in Egypt. He received medal and diploma from the International Congress of Anthropological Sciences, in Paris, 1878. He was a fellow of the American Academy of Arts and Sciences, Corresponding Secretary of the Massachusetts Historical Society, Vice President of the Boston Society of Natural History, and a frequent contributor to scientific journals both French and English, including RECORDS OF THE PAST. He furnished important contributions also to Prof. G. F. Wright's *Ice Age in North America* and *Man and the Glacial Period*. He was, withal, a gentleman of unblemished character, of polished manners, of wide interests in general affairs and of strong and enduring friendships. His collection of palæolithic implements and of specimens of fine art was one of the largest and most valuable in the country. These he has given to the Peabody Archaeological Museum of Cambridge, the Boston Museum of Fine Arts and the Boston Public Library.

## EDITORIAL NOTES

ROMAN MOSIAC NEAR TRIPOLI.—We see it reported that the Italian soldiers in entrenching themselves before Tripoli during the early winter uncovered a Roman mosaic in a good state of preservation.

RETURN OF PROFESSOR BINGHAM.—We note that Prof. Hiram Bingham has returned from his expedition to Peru with much valuable material. We shall await with interest the formal report of the results of his work.

PREHISTORIC RUSSIAN FORT.—Reports via London state that last summer a stone fortress of prehistoric date was found 20 miles from Kars. The masonry is somewhat roughly laid, but well laid, nevertheless. A number of figures of gods, mostly in animal forms, were found.

ANCIENT BURIALS IN KENT, ENGLAND.—Last fall there were reports of the discovery of ancient burials in Kent, England. First a series of Saxon burials was encountered. Below these were a number of graves arranged around a circular trench in which the bodies had been buried with arms and legs flexed. Possibly they belong to the Bronze Age.

STATUE OF VENUS IN NAPLES MUSEUM.—We hear that another Venus has been added to the Naples Museum—one of the most beautiful, it is said, of the statues that have come down from antiquity. It was dug up recently at Mondragone which is on the ancient site of Sinuessa.

NATIVES LIVING IN THE STONE AGE.—Reports of the British ornithological expedition to Dutch New Guinea state that they found in certain regions visited, natives living in the stone age, with no iron or metal of any kind. They used stone axes for cutting. Some of their weapons were beautifully carved by means of bits of shell and pigs' tusks.

RESIGNATION OF DR. UHLE.—Dr. Max Uhle has resigned the directorship of the Museo de Historia Nacional at Lima, Peru, and accepted the offer of the Chilian government to take charge of the archæological research of the latter country, with headquarters at Santiago.

ARRANGEMENT OF NEOLITHIC DWELLINGS.—According to reports, Prof. Karl Schuchardt of Berlin believes that in the neolithic houses found by him near Naumburg he can distinguish between a bed room and a general living room. In some he finds a cellar, from all of which he would conclude that prehistoric man was more foresighted than had been thought. The burrows found in settlements of the new stone age he would consider as intended for store houses, not for dwellings.

DELEGATE FROM PARIS TO THE CENTENARY CELEBRATION OF PHILADELPHIA ACADEMY OF NATURAL SCIENCES.—Prof. George Grant MacCurdy was the delegate from the Paris School of Anthropology to the centenary celebration of the Philadelphia Academy of Natural Sciences which took place on March 19-21.

PROFESSOR MACCURDY IN COLUMBUS.—Prof. George Grant MacCurdy gave a public lecture in the University Chapel, Columbus, on the evening of March 1 by invitation of the Omega Chapter of the Sigma Xi of the Ohio State University, his subject being Pre-Columbian Art.

DELEGATE FROM YALE TO INTERNATIONAL CONGRESS OF ANTHROPOLOGY AND PREHISTORIC ARCHÆOLOGY.—Prof. George Grant MacCurdy will be the delegate from Yale University to the International Congress of Anthropology and Prehistoric Archæology to be held in Geneva, Switzerland, during the first week of September, 1912.

DEATH OF DR. PAUL TOPINARD.—Doctor Paul Topinard, who died December 22, 1911, in his eighty-second year, was one of the first 6 professors at the *Ecole d'Anthropologie* of Paris. He is best known for his works: *L'Anthropologie*; *Eléments d'Anthropologie générale*; and *L'Homme dans la nature*. These have been translated into many languages.

PLAY OF SOPHOCLES FOUND.—It is reported that among the Oxyrhynchus papyri discovered by Doctors Grenfel and Hunt there have been found 400 lines—about half—of a satirical play by Sophocles. It is entitled *Ichneutae*; or *the Trackers*. The theme is the exploits of Hermes—his theft of Apollo's cattle and the invention of the lyre.

SAXON CEMETERY IN WILTSHIRE, ENGLAND.—Two skeletons have been found near Purton, Wiltshire, which, considered with the supposedly Saxon objects found, seem to indicate that the site was a Saxon cemetery—the first found in Wiltshire. An iron sword, an iron-socketed spearhead and a glass bead were the objects found.

MARKER FOR THE END OF THE SANTA FÉ TRAIL.—On August 23, 1911 the marker for the end of the Santa Fé Trail was unveiled in the Plaza at Santa Fé, New Mexico. A large company gathered to assist in the ceremonies. The State Regent of the D. A. R. presented the monument to the state; Governor Mills and Mayor Seligman accepted it in behalf of the state and the city. The governor's daughter unveiled it.

PAJARITAN ROOM IN MUSEUM AT SANTE FÉ.—There is in the Museum of American Archæology at Santa Fé a room devoted to relics from the Pajarito Plateau. Many of them were gathered by Doctor Edgar L. Hewett 10 or 12 years ago and were at first placed with the New Mexico Normal University at Las Vegas. Others were sent by Dr. Hewett to the Smithsonian Institution, which has now returned them to New Mexico.

**UNIQUE TOWER IN THE RAMON VIGIL GRANT.**—U. S. Surveyor W. B. Douglass reported last August that he had made some interesting archæological discoveries in the Ramon Vigil grant. On the summit of an almost inaccessible spur overlooking the Frijoles Canyon he found a stone structure 20 ft. in diameter with walls 3 ft. high and a doorway facing east. It was loosely constructed of large stones.

**TWO SKELETONS FROM BEDFORDSHIRE, ENGLAND.**—It is reported that an interesting find of skeletons of the Stone Age was made last fall at Astwick, in Bedfordshire, England. They are the skeleton of a man—perhaps a chieftain—and a woman. The woman was laid at right angles to the man, with her feet resting against the side of his body. Both skeletons are complete and in a good state of preservation.

**FORTIFICATIONS AT ALESIA.**—Major Espérandieu reports that he has unearthed the walls of the fortifications behind which Vercingetorix with his Gauls made their last stand against Caesar. The ramparts were made in alternate sections of earthwork and wooden beams faced with rough stone. The wood has decayed, but the places which it occupied are discernible and the quadrangular spikes that fastened the beams are there still.

**FURTHER FINDS FROM THE SUNKEN SHIP OF MAHDIA.**—M. Merlin reports further finds in connection with the sunken vessel of Mahdia on the coast of Tunis. These include a marble basrelief of Asklepios and Hygeia, much pottery and many bronze articles. Among them are a bust of Athena, masks, animal heads, bearded satyrs' heads and many household utensils. The divers have found some animal and human bones, indicating that the wreck was attended with loss of life.

**REPORT ON MONUMENTS OF WALES.**—The second report of the Royal Commission appointed to inventory the archæological and historical monuments of Wales and Monmouthshire was issued last summer. The work of making the inventory has been carried on by the secretary of the Commission and two assistant inspecting officers, who visited and described a large number of monuments. The Commission has called attention to certain monuments which are in danger of destruction, but it has no authority to stop such destruction.

**WORK OF AMERICAN SCHOOL AT CORINTH.**—Dr. B. H. Hill has returned to Greece, expecting to continue excavations at Corinth for the American School for Classical Studies. One of the interesting incidents in connection with the work at Corinth was the discovery of the fountain of Pirene, built in 600 B.C. One of the men connected with the work looked down a well and was struck with its similarity to the Fountain of Pirene as described by Pausanias. Further investigation revealed the stone arches and channels that were once part of the water system of Corinth.



**REMAINS OF TOWN ATTACKED BY CAESAR.**—According to the New York *Times* excavations at the village of Sos in France have revealed the remains of a pre-Roman city with formidable ramparts of huge blocks of stone. This seems to identify the site as the "town of the Sotiates" which resisted Caesar so stoutly in 56 B.C. Subterranean galleries and mining works contemporary with the Romans have been discovered, agreeing with the description given by Caesar of this town. A number of Latin inscriptions and tombs were also found.

**PREHISTORIC RELICS NEAR MUNICH.**—In the village of Grunwald near Munich a number of prehistoric finds were recently made. "Nine graves, containing 11 urns were opened, and contained 150 bronze articles such as needles, cups, bracelets, etc. The ornamentation of some of the hairpins presents a pattern which has not been found before. There are also a number of tiny rings strung together, which, it is presumed, served as money. The graves probably belong to the time between the Bronze and Hallstatt ages."

**EXCAVATIONS AT SARDIS.**—During the spring of 1911 a second campaign was carried on at Sardis by Professor Butler. The greater part of the temple previously found was excavated and more tombs were opened. The eastern end of the temple was in better condition than the western. Some well-preserved capitals of columns were found. About 50 perfect tetradrachms of Alexander and his successors which had slipped down into a narrow crack in the pavement were brought to light. Several inscriptions in Lydian characters were discovered.

**GORGON AT CORFU.**—Chief among the sculpture fragments found at Corfu by the Germans during the season of 1910-11 was a Gorgon, which was the central figure in the decoration of one of the gables of a temple nearly destroyed. On either side of the Gorgon was a smaller figure, one representing Pegasus and the other Chrysaor, and further out were two crouching panthers. Other fragments represent Zeus smiting a giant with a thunder bolt, a bearded old man who had fallen down and an enthroned goddess threatened by a man with a lance. These are considered as part of a representation of the fight between the gods and the giants.

**EXCAVATIONS BY THE SCHOOL OF AMERICAN ARCHAEOLOGY.**—During the summer and fall of 1911 the School of American Archaeology conducted excavations on the plateau west of Jemez Springs, New Mexico. Doctor Hewett and Mr. F. W. Hodge were in charge. The site excavated was Amoxiumqua on a high mesa overlooking Jemez Hot Springs. It was an important town in prehistoric times, abandoned and re-inhabited during Spanish times and finally abandoned before 1680. Many pieces of pottery as well as stone and bone implements were found. Twenty-four Venetian beads found in one of the graves prove Spanish influence. The ruins show two towns, built one upon the other, the older being considerably larger.



**TO PRESERVE RECORDS OF EARLY CALIFORNIA.**—The Society of Native Sons (of California) has joined with the University of California to gather and preserve the records of the discovery, exploration and development of California. They have provided for 3 fellowships for the next year. Two of the holders are to travel in California gathering material of every kind bearing upon the subject, and the third is to carry on research in Spain. L. P. Briggs was sent to Spain last summer by the Native Sons to do work along these lines. All manuscripts and papers obtained will be preserved in the fireproof University library.

**MEDICAL PAPYRUS.**—Reports from Cairo state that a manuscript found in a ruined house during Professor Reisner's work for the University of California some years ago had just been published. It is almost complete, in clear hieratic writing and nearly all in black ink. It dates from between the XII and XVIII dynasties. Taken with the Ebers and a Berlin papyrus this gives a full account of ancient Egyptian medical knowledge and practice. Lists of diseases and the remedies for them are given. No knowledge of contagion or infection is shown. All pains and aches are attributed to the agency of evil spirits or the gods. The administration of drugs was always accompanied by some enchantment.

**EXCAVATIONS AT OLD SARUM.**—During 1911 excavations were carried on at Old Sarum, England. The work of excavating the castle area was completed, but only a few remains of masonry were found. An old uncompleted well in the center of the northern part was examined. Here the old ground level, consisting of gravel, was found 17 ft. below the surface. Some fragments of Roman pottery and 3 neolithic flakes were uncovered. In the southeast section of the area a building containing ovens, probably the bakery and brewhouse, was found. Among the finds were a gold ring of the Stuart period, pottery and a metal object, partly gilded, of unknown use.

**EXPLORATIONS AT CYRENE.**—The explorations of Cyrene under Dr. Norton during 1910-11 brought forth many beautiful sculptures of pure Greek design. Most of the digging was on top of the hill above the sacred fountain of the acropolis which is of the II or III century B.C. A large part of the ancient cemetery was cleared. None of the earlier bodies were found; but tombs which had been used for later burial were discovered. Lamps, vases and terra cotta figurines of the Tanagra type were among the finds. Some fine sculpture was brought to light on the acropolis outside a building partly excavated. One statue found shows a union of painting and sculpture; the face is partly painted. The buildings and works of art were mostly Greek, although the city was under Roman domination.

**EGYPT EXPLORATION FUND.**—The Egypt Exploration Fund is continuing its work at Abydos this season under the direction of Professor Naville as formerly. The Osireion, the underground temple dedicated to the mysteries of Osiris and the underworld, is the main object of investigation at present. The secret entrance to the Osireion is being sought within the great Abydos Temple.

Reports from Cairo early in February state that a heretofore unentered tomb has been opened at Abydos and was found to contain a dozen coffins of limestone. Each coffin held a mummy with the gold and blue paintings on the bandagings fresh and bright.

A XII dynasty tomb, when opened, showed the skeleton of a woman around whose neck was a necklace of beads and on whose left hand were 3 scarabs. Another skeleton of a woman was found with bracelets of cowries.

**DATE OF PAPYRI FROM ELEPHANTINÉ.**—"In the *Comptes Rendus* . . . M. Pognon . . . draws attention to the dating of the Aramaic papyri lately found at Elephantinê, and published by Professor Sayce and Doctor Cowley. It has hitherto been considered that the calendar to which they refer must be the religious calendar of the Jews and it has been difficult to make this agree with the Egyptian dates. M. Pognon now shows, however, that the calendar of the scribes of the Elephantinê papyri was the Babylonian one, which formed, as he says, the official calendar of the Semitic populations subject to the Persian power. This, on the same authority, has been admirably reconstructed by Professor Mahler (of Vienna) in his well-known work on Babylonian chronology, and by the aid of this he is able to give the date of 7 of the Elephantinê papyri with such particularity as to comprise the very day of the month in which they were written. These range from September 12, 471 B. C., to February 10, 410 B. C., and for two of the three remaining, he suggests a probable date between these figures. The concordance of the Babylonian with the Julian dates he obtains through a passage in Censorious. If M. Pognon's conclusions be accepted, as seems likely, he will have accomplished a great feat in chronology." [*Athenæum*, February 3, 1912.]

**TEMPLE OF ABU SIMBEL.**—According to the *Public Ledger* (Philadelphia) the work of the Egyptian Department of Antiquities at the Temple of Abu Simbel on the west bank of the Nile about 30 miles below Wady Halfa is of great interest. The temple is entirely cut out of the sandstone bluff overlooking the river. It was begun by Seti I and completed by Rameses II. It was designed for the worship of Ra-Harmachis, the Sun God. The façade and inner halls are ornamented with colossal figures, pillars, etc. There are 12 chambers beside the great halls.

The great difficulty encountered in excavating was the sand which had drifted and was still drifting around and over the temple. This was removed and thrown down the slope in front of the temple, making a platform which gives an advantageous standpoint from which to view the ruins. Under the sand removed, was a small chapel in which stood an altar with two obelisks before it and a shrine beside it. In the shrine were the figures of a large scarab and an ape, and upon the altar 4 more apes. On the terrace in front was a row of statues, figures of the Pharaoh and of the sacred hawk of the sun alternating along the entire length. The colossi on the façade were in a dangerous condition. Cement was shot into the large cracks; the smaller ones were fastened together with iron pins, thus putting the statues into a safe condition again.

WORK AT OSTIA.—At Ostia 1,650 yards of the Via Decumana have been laid bare. In the theatre has been found a fine statue of Venus, probably a copy of a Hellenistic work of art. Baths with the usual appliances for heating were encountered as might be expected. Some wall decorations have been preserved.

"Scholars may remember that Clement of Alexandria, sneering in his *Protrepticos* (or *Exhortations*) at the pagan religions, remarks that it was the custom of the Romans to place a shrine to the goddess Fortune in a certain part of their houses which is usually not mentioned. Learned Germans in their turn ridiculed the idea, as is their wont, and tried to suggest all sorts of emendations. Professor Vagliere has now proved that, as usual, the ancient author knew more than his modern commentators, for in that identical apartment of the firemen's quarters such a shrine with an inscription to Fortune has come to light—the first known confirmation of the Alexandrian divine's strange assertion. Another inscription informs us that the firemen received corn gratis, while their barracks contain what is even now not common in Rome—a drinking trough for horses. Huge cisterns under the palestra with 6 parallel but united galleries further impress one with the excellence of the municipal arrangements, and there is even a bronze tap for letting out the water. Five furnaces for heating and various finely-executed and almost perfect mosaic pavements afford further proofs of the high degree of civilization and culture at Ostia."

WORK AT AVEBURY BY THE BRITISH ASSOCIATION.—The British Association conducted its third season's work at Avebury beginning April 24, 1911. A large section of the great fosse was re-excavated. In places the depth from the surface to the bottom of the fosse was  $18\frac{1}{2}$  ft. On the bottom of the fosse were found rib bones of oxen (one worked), pieces of red-deer antler, and broken picks of the same material. Between 1 and 3 ft. from the surface mediæval pottery was found; and from  $3\frac{1}{2}$  to  $4\frac{1}{2}$  ft. the Roman stratum occurred. While shards of common Romano-British pottery had been uncovered in previous seasons, metal was first found during this season. A small iron cleat for sandals and a Roman bronze brooch or fibula of the "Aucissa" type were found. The brooch has a deeply arched bow ornamented longitudinally with a beaded design; the nose consists of a rounded knob; the pin is hinged; the head of the bow terminates in a flat plate which bears the inscription AVCISSA.

Below the Roman deposit and above the chalk rubble, parts of two worked reindeer antlers were found and a chipped flint knife. Fragments of handmade prehistoric pottery were also found at this level, i.e., 5.8 ft. from the surface. This pottery was ornamented on both faces by the impression of twisted grass and finger nails. A little higher than this were several fragments of a handmade vessel having a typical "shoulder" with hollow moulding below it. The ornamentation consisted of rows of herring-bone pattern, made by the use of some notched implement. This ware is usually regarded as belonging to the stone age. The evidence of this pottery taken with the absence of metal below the Roman level strengthens the contention that the fosse is of Neolithic construction.

ARCHAEOLOGICAL LEGISLATION IN PERU.—We are glad to learn that the government of Peru is awake to the desirability of keeping its antiquities at home and we trust they will provide adequately for their safe preservation. License for archaeological explorations is now given only to recognized scientific or educational societies and institutions and even then a government representative must have supervision. All specimens are considered the property of the state, and their exportation is allowed only in the case of duplicates after securing special permission. Photographs and casts may be made of specimens, if the originals are not thereby injured in any way.

THE LINDEN MUSEUM AT STUTTGART.—Thanks to the untiring efforts of the late Count Karl von Linden, the city of Stuttgart, Germany, has a geographical and ethnological museum which is remarkable for the extent and character of its collections.

Originally intended as a museum of a rather commercial character to acquaint Germans with the customs and products of foreign countries, the institution has broadened considerably and become more scientific in character. Von Linden recognized that the time was not far distant when most of the savage peoples of the world would cease to follow the ways of their ancestors, and that, under the influence of civilization, many an old art and handicraft would be forever lost. It was imperative for some scientifically organized and conducted museum to preserve the records of primitive civilizations.

Thanks to his personal efforts, he rapidly collected a large number of costumes, carvings, weapons of savage workmanship, and a vast amount of other exceedingly valuable ethnographic material. So rapidly did this collection grow that in 1910 it was necessary to erect a special building in Stuttgart, which in dimensions and beauty of architecture compares favorably with the largest museums of the kind in the world. The new museum was officially opened on May 28, 1911. Unfortunately, von Linden did not live to see that event. He died on January 15, 1910.

In the von Linden collections will be found specimens from every country in the world. Africa, Asia, North and South America, Polynesia, Australia—all are represented by countless objects of great interest, such as weapons, carvings, head-dresses, shields, canoes, idols and the like. This material was contributed for the most part by government officials, missionaries and travelers. Some divisions are more complete than others. Moreover, there are some duplicates. For the purpose of completing the imperfect collections, the museum is prepared to exchange its duplicates for objects which it does not already possess. Thus, while the American Indian of the Far West is well represented, the museum feels the need of specimens from Northwestern Canada, Mexico, Central America and South America. Collectors and museum directors who desire to enter into exchange relations with the Linden Museum may address the director of the Museum für Länder—u. Völkerkunde (Linden Museum), Stuttgart, Germany.

